The New York Medical Times

VOL. XX. NEW YORK, DECEMBER, 1892. No. 9.

ORIGINAL ARTICLES.

THE STATE INSANE HOSPITAL, MIDDLETOWN, NEW YORK.

BY EGBERT GUERNSEY, M. D.

IS THE State of New York justified in considering the State Asylum for the Insane, at Middletown, as being like all the other State Asylums in the State, and as such, under obligation to receive pauper and indigent insane patients, from the district in which it is located, whether desiring homœopathic treatment or not, to the exclusion of patients from other parts of the State, who particularly desire such treatment?

That the asylum in question was originally intended to be one where homœopathic treatment, and that alone, should be practised, is clearly shown by legislative acts.

The act of 1870, specifically provided that "the care and treatment of the insane and inebriate" should be "upon the principles of medicine known as the homœopathic."

Sec. 8 of this act, directs the trustees to appoint a "superintending homœopathic physician and assistants."

Sec. 11 appropriates a sum not to exceed $150,000, to be paid only when an equal sum should be subscribed by private persons and actually paid in cash; to be applied to the purchase of a site for, and the construction and maintenance of said asylum.

This act of 1870, was in the nature of a contract with the donors of funds, the consideration being, that if private persons would subscribe $150,000, the State would appropriate a like amount. Why? Application had been made by citizens of the State, who were adherents of the homœopathic doctrine, to the Legislature—undoubtedly offering donations—and asking for conditional assistance from the State. This proposition was accepted by the highest authority of the State, and the contract was made, as evidenced by the act of 1870.

Chapter 237, Laws of 1871, amendatory of the act of 1870 ratifies the original contract, but instead of demanding donations of $150,000 from the friends and projectors of the asylum, the Legislature agrees to pay twice the amount of the cost of site, when a deed of conveyance for same shall have been executed and delivered to the State; and thereafter, for each $10,000 donated and paid in, the State shall pay twice the amount.

An act known as the "Willard Asylum Act," passed April 8, 1865, provides for the establishing of an asylum for the chronic insane, who are paupers; and directs the County Judges and other authorities, to send such to said asylum. This Asylum was founded by an act passed five years earlier than the act creating the Homœopathic Asylum at Middletown, and when the latter law was enacted, there was no evidence of an intention by the Legislature to classify the Middletown institution with the "Willard" or any other State institution.

Chapter 571, Laws of 1873, converts the commissioners then in office, appointed by virtue of the act of 1867, into a "board of commissioners," to be called "The State Board of Charities." This board was permitted to visit and inspect all asylums, investigate grievances and abuses, and to demand any information, etc. The same act created a State Commissioner in Lunacy, who was ex-officio, a member of the State Board of Charities. He was directed to examine into and report to said board the condition of the patients and the management and conduct of the asylums, etc. This act carefully provides, however, that the duties of said Commissioner and Board "shall be performed, as far as practicable, so as not to prejudice the established and reasonable regulations of such asylums, etc."

Chapter 414, Laws of 1874, directs County Judges and superintendents of the poor in any of the counties of the State and all officers having authority to commit insane persons to any of the State Lunatic Asylums in this State, "to commit indigent and pauper insane persons *for whom homœopathic treatment may be desired*," to the asylum at Middletown; provided the number in the aggregate, of such patients, shall not exceed the accommodations at the disposal of the superintendent." This is a distinct recognition of the original purpose of that asylum.

Chapter 446, Title 7, Laws of 1874, codifies the previous acts relating to the Middletown asylum. And, for the first time, the Legislature distinctly directs that the twenty-one trustees shall be "adherents of homœopathy." The financial and other business concerns are put under the direction of said trustees, and they alone are authorized to establish all by-laws, rules and regulations. And this act generally is couched in terms fully ratify-

ing and confirming the original contract with the projectors and donors.

Two years later Chapter 121, Laws of 1876, enacts that whenever a vacancy occurs in the board of trustees (at Middletown), the Governor shall appoint proper persons to fill such vacancies; "and the acceptance of the office of trustee by the persons thus appointed shall be a pledge that they will maintain the homœopathic mode of treatment in the said asylum." This would seem to be another clear ratification of the original contract.

No further legislation affecting this asylum, other than by way of annual appropriation, etc., appears to have been made until 1889.

Chapter 283, Laws of 1889, provides for the creation of the State Commission in Lunacy, to be composed of one physician, one lawyer and "one citizen of reputable character."

These commissioners were given full power to visit and examine institutions where insane persons were held in custody; but the entering at length in the "visiting book" the results of their examinations, with recommendations deemed necessary for the better management or improvement of the institutions seems to have been the extent of their authority in that direction contemplated by the law-making power. And no interference with the territorial privileges of the Middletown asylum seems to have been made or intended in this act.

In 1889 the number of insane in this State, cared for mostly in State, county and private hospitals, was 15,000. The Commission of Lunacy then created was in the form of a supervisory board to bring all the institutions in the State more in rapport with each other, and to systematize the statistics so as to render them more available through a central office; but their power was so carefully restricted that even their recommendations need not be adopted unless approved by a judge of the Supreme Court.

We have seen that the original charter of this institution was for a homœopathic asylum, and its transfer from corporate hands to the State and its adoption as a State institution, in the form of a contract of which there has not only been no violation of a single clause on the part of the institution, but its management has so far met the purpose for which it was established as to commend itself, by the honesty and efficiency of its work, to public approval through all these years from 1870 to the present.

Chapter 126, Laws of 1890, is the first apparent endeavor on the part of the Legislature to abrogate or avoid the terms of the original contract entered into by Acts of 1870 and 1871.

This act divides the State into as many asylum districts as there were State asylums: to be thus districted by the State Commissioners in Lunacy, the President of the State Board of Charities and the Comptroller, who "shall define the boundaries of the several districts," etc. And this act seems to put the State Homœopathic Asylum, at Middletown, on the same plane as all the other State asylums, and under the direction and control of the Commissioners as to what pauper and indigent patients and from what territory shall be sent there.

Chapter 91, Laws of 1891, appropriates moneys for the increase of accommodations at the various State asylums, so as to provide for certain numbers of patients (stated), and the number of pauper and indigent patients, thus apportioned to the asylum at Middletown, is two hundred.

The conclusion is inevitable, that by enacting the laws of 1890 and 1891, the Legislature did consider the State Homœopathic Asylum for the Insane, at Middletown, as being, like all the other State asylums in the State, under obligation to receive pauper and indigent insane patients from the district in which said asylum is located, whether desiring homœopathic treatment or not, to the exclusion of patients from other parts of the State who particularly desire such treatment.

There can be no doubt, however, the position so taken by the Legislature is a violation of good faith and a breach of the original contract made in 1870 and 1871, and frequently, thereafter, ratified and confirmed by acts above referred to.

We do not for a moment question the justice and the wisdom of the central principle of the so-called "State care act for the insane" of 1891, that of making these more than 15,000 insane persons then cared for in State, county and private institutions "*Wards of the State*," but we do object, strenuously object, in the name of humanity and justice to those provisions of the law which have made the carrying out of the principle productive of untold distress and incalculable injury. Instead of waiting until proper provisions had been made for their reception and care, the insane and demented in county almshouses were precipitated, with undue haste, into the State institutions, crowding their wards and shutting out those most likely to be benefited, turning hospitals for relief and cure into almshouses with vastly diminished facilities for that treatment, which in many cases alone promise a chance for permanent or even temporary relief.

It will take at least two years for any of our institutions to erect the accommodations contemplated and made necessary by this act. Can there be any question that the transfer of patients should have been more progressive, as accommodations could be provided and that in no case the just rights of any class, rich or poor, should have been violated or that there should be on the part of the State any violation of good faith.

That there has been a violation of good faith in reference to the hospital at Middletown, unintentional I am constrained to believe, from undue

consideration on the part of our legislators, I think will be apparent to every thoughtful mind from a careful perusal of the laws, a brief abstract of which I have here presented.

This institution was erected for a special purpose, not only clearly and distinctly defined in its charter, but at the time of the contract when it became a State institution, and subsequently, especially by the law of 1874, amply confirmed. By the working of this law, during the past year, more than seventy persons from different parts of the State, some of them physicians who were active in the organization of the institution, have been denied admission to its privileges as a homœopathic hospital, which they earnestly desired, because the wards were filled with patients from the almshouses of a district defined by law.

The hospital has become what it is, in a great measure, through the strong interest and generosity of the friends of the medical school of which it is an exponent. The buildings have been erected and supplied with the necessary furniture through appropriations made by the State, but not only has the State never been called upon for one cent for maintenance, and the poor sent here from different counties of the State have been taken at as low a rate as any other State institution, but the luxuries with which its wards are filled and which are seen in the beautiful lawns and all the surroundings, which have so much softened the restraint of asylum life, have been contributed by the friends of the institution. The musical instruments, the engravings, the frescoed walls, the conservatories in which are grown the thousands of plants for the decoration of house and grounds, the elegant library building, all have been the good-will offerings of friends who believed in the work of the institution, a work which has gained its brilliant results by a careful study of the laws of life, not only in the administration of drugs, but in pure air of the proper temperature, nourishing food adapted to the conditions of the sick, rest, exercise carefully directed, cleanliness and the influence of harmonious and comfortable surroundings, all of which are such essential features in the school to which the institution belongs, and which the good-will of its friends has enabled it to supply. It is a matter of congratulation that the districting board at a recent meeting have, to a certain extent, admitted the justice of the claims of the State Hospital at Middletown by so far reducing the size of its district as to now only include four counties, instead of seven as formerly, and permit the admission of those desiring homœopathic treatment from any part of the State, they paying the cost of transportation. It will be readily seen that, without free transportation, pauper patients outside of the district will be deprived of the privileges of the institution from inability to reach it. With that clause changed, the Middletown Hospital, with the new buildings already completed and in contemplation, will probably be able to supply accommodations to all who may apply for admission. To better secure the end for which the institution was organized and to which the good faith of the State was pledged, it will apply to the next Legislature for such a change in the law as to make the cost of transportation of the pauper and indigent insane a charge to be paid by the county, or when the "State care act," shall be fully in effect a charge upon the State, as provided in the laws of 1890. The Middletown Hospital feels that in asking for a restoration of the rights pledged by its charter and confirmed by subsequent laws, it is simply asking for that justice which the Legislature will unhesitatingly concede when the matter is brought clearly to its notice.

With the harmonizing influence of ever advancing medical science the time may come, and we sincerely hope will, at no distant day, when the dividing line between all schools will be so far obliterated that the whole medical profession can stand side by side, working earnestly and energetically in a common cause, but until that time we feel that in asking for that liberty of thought and action so dear to every American citizen we shall not ask in vain.

NERVOUS MATTER, WHAT IS IT?

By James A. Carmichael, M. D., New York.

AT THE conclusion of the November article upon the above subject, we suggested that in the cavity of the tympanum of the ear there are several curious and significant combinations of nerves coming from various sources that demand a more careful investigation than is given to them in the books, as to the why and wherefore of their convention at this given point. It was proposed to inquire not only as to what nerves they are, but whence they come, what their organic nature, what associations they maintain and what may be their influences, physiological, pathological and emotional. In the plan adopted in all our investigations upon the subject of nervous matter, we have endeavored to be as brief and concise, at the same time as comprehensive, as possible. Especially has this been the case whenever it has seemed necessary to resort to anatomical detail. But as no workman can work without his tools, so is it equally impossible to comprehend or explain the mysteries of nervous sympathies without an adequate knowledge of nerves, as indicated above, viz., as to their origin, their nature, their associations and the results of those associations.

Following this plan with the subject before us, let us review, "in petto," all of the facts, as far as lies in our power, relating to the biogenic his-

tory, associations, etc., of the nerves constituting the tympanic combination.

To begin with, the nerve-force supplying the muscles that move the pons ossicularis, as a whole, and also its individual ossicles, and, as a necessary consequence, acting upon the external and internal membranes, or ear-drums, by which their alternate tension and relaxation are produced. The names of the tympanic muscles, already given, are, as well known, the tensors and laxators of the membrane of the exterior drum and the stapedius impressing the inner membrane. Now, let us direct our attention, in the first place, to the nerve-force acting upon the tympanic muscles and regulating their movements. In the second, to its organic nature, whether motor, sensory, ganglionic, voluntary or involuntary. In the third, to its origin, association and their various influences in health and disease. The first nerve-force of the tympanic combination which we shall examine is that derived from one of the sympathetic group of ganglia, and it resides in what is called the "otic ganglion," because of its connection with *ους-οτος*, the ear. It consists of a small, round, ganglionic body, from which emerge its nervous autennæ, tentacula, or feelers, by which its powers are transmitted, and also its connections with other nerves maintained. Its locality is extra-cranial and just below the foramen ovale of the sphenoid bone. In organic structure it is composed, like all other ganglia of the sympathetic chain, of "substantia gelatinosa," and inherits the subtle vitality common to the great sympathetic system, partaking of its ganglionic, emotional and sympathetic properties. In the next place, as to the associations of the otic ganglion with other nerves.

These are numerous, and may we beg that our reader will accompany us as patiently as may be while we enumerate them, as it is only by familiarity with them that we can hope to be able to offer an explanation of the many nervous sympathies which they produce. It will be remembered that in the August number of this journal we suggested a diagram, for purposes of simplification, of what we there denominated as the "oculo-globar nerve association," which enabled us to see at a glance the many nervous combinations of nerves coming from various points, and concentrating their forces for transmission to the globe of the eye, extrinsically and intrinsically. We propose to do the same thing here, and for the same purpose of simplification, otherwise we should become inextricably involved in a medley of nerve intricacy, and go pottering about, and finally get ourselves wound up in a confusing and head-aching muddle. There are many nerves contributing to this tympanic plexus. They come from different sources, vary in their organic nature, each endowed with the attributes bestowed by that organic nature and consistent with the source from which they spring. They convene to form a plexus—the tympanic plexus—in which there is diversified power, or rather those powers, as in the brachial plexus, for example, or, more diversified still, as in the organic nature of the fifth pair of cranial nerves, the trigeminus or trifacial, in which there is the combination of ganglionic or sympathetic, of sensory, of motor quality to which is superadded the quality of special sense—the gustatory. So from the tympanic plexus we shall see an irradiation of diverse power, extending here and there, bringing and holding portions of the physical and mental body in close communion and unbroken sympathy. Let the seemingly insignificant little molecular body—the otic ganglion—represent the nucleus upon which we will build the structure of the tympanic nervous combination. We have already said that it was composed of the same material used in the construction of the great sympathetic group of ganglia, and therefore endowed with the properties appertaining to that wonderful nerve-power within us that exercises such potency in so many and such varied functional activities, and that help to keep the lamp of life burning to the end. The connections of the otic ganglion are represented in the following diagram, and they are with: 1st. Sympathetic, by union with plexus around middle meningeal artery. 2d. Facial, by small petrosal continued from the tympanic plexus. 3d. Trigeminus, by inferior maxillary and auriculo-temporal, motion and sensation. 4th. Glosso-pharyngeal by petrosal—branch of Jacobson's nerve—which brings the ganglion in connection with tongue, pharynx, tonsils, eustachian tube, palate and pharyngeal plexus.

Nerves constituting the tympanic plexus: 1st. Branches to muscles of tympanum—tensors and laxators. 2d. To lining membrane. 3d. Branches from glosso-pharyngeal, Jacobson's nerve. 4th. From carotid plexus—vaso-motor. 5th. From Meckel's ganglion by vidian. 6th. From otic ganglion, small petrosal. Finally, that other remarkable nerve-force, not directly connected with the tympanic plexus, but singularly associated, as we shall see, with the auditory machinery, so to speak, and establishing a subtle sympathy—as we shall venture to suggest—between the senses of hearing and of taste. We refer to the facial nerve and its remarkable branch, the chorda tympani.

Before considering these associations of the otic ganglion, first, with the tympanic plexus, and second, those of its connections that are extra-cranial, let us see if there is any analogy between the powers dispensed by the ganglion and any other of the sympathetic group.

Have we seen anything like it before in our wanderings through these labyrinthine nerve-

mazes? What did we gather from the olfactory trinity that bears any analogy here? What did we make of the bulbus olfactorius, from which proceeds one of the individualities of nerve-force that united with two others to form that trinity? 'Tis true that from that combination emerged a special sense. There is no such power in the otic ganglion, but there is a power in it, and radiating from it, absolutely identical with one of the elements of the trinity, and it is the involuntary or emotional instinct, so to speak, proceeding from the third member of the olfactory combination, its sympathetic, ganglionic, emotional, involuntary and instinctive quality, for which it is indebted to another small ganglion, the sphenopalatine, or Meckel's ganglion, the second of the sympathetic group, and from which radiates its subtle nerve-force to help to complete the trinity of olfaction, and the union, by its descending palatine branches of smell and taste. Did we find any other specific quality of nerve-force, as we went along, to which we may liken that under present consideration? We did, and it was just such another seemingly insignificant little molecular body, no larger than the head of a pin, seated just outside and behind the eyeball, and yet charged with what a power, vital to vision and all its inestimable joys and privileges! Those of our readers who have gone along with us in our search for the solution of these nerve-wonders and mysteries can easily recall what food for thought and reflection was given us by the enumeration of the functional powers of that little molecular body, the opthalmic ganglion. How it opened and closed the curtain of the eye, the iris, to admit the welcome light, and the images it bore upon its rays, and how the duty was imposed upon it, to see to it that no obtrusive luminous force from without inflicted hurt or harm to the delicate organ to which we are indebted for so much. It is only necessary to allude to the many other services rendered by that little body in the preservation and protection of the various elements of the organ of vision, as also its associations with other nerves of various powers, to enable us to confirm the absolute analogy that we desire to trace and establish. By-and-by we shall go even further, and suggest the possibility of an identical or similar relationship existing between the otic ganglion and the special sense of hearing. So that, as the ganglion of Meckel contributes its sympathetic ganglionic and emotional qualities to the perfection of olfaction, and the ophthalmic ganglion its tutelary and protective guardianship to the sense of vision, even so this next member, or link, of the sympathetic chain may be seen to be intelligently performing its part, too, by so regulating the action of the muscles under its domination, the tensors and laxators of the external and internal membranes of the tympanum, and they, in their turn, so providing the necessary tension and relaxation of the ear-drums, without and within, that no undue sonorous vibration shall find the sentries sleeping and pass the bony bridge, destroying as it goes. Then there is no invasion of the secret recesses of the home wherein no sounds are welcome except those that speak in soft and gentle tones, and such as fall harmless upon nervous matter that will admit of no rude touch. Now it will be in order to inquire into the meaning of the combination known as the tympanic plexus. In the first place, we have seen that it is complex, that it is composed of nerve-branches coming from sources of various nerve-quality, and therefore inheriting individually and collectively a variety of nerve-force. All these varieties have a meaning. Let us try and find out what they mean and what their business is in the cavity of the tympanum. Following our diagram, we propose to take them seriatim. First, let us consider the meaning of the union, extra-cranially, between the otic ganglion and the sympathetic chain of ganglia, and then why the otic sends an emissary to the muscles controlling the tension and relaxation of the ear-drums, external and internal, and consequently impressing the sense of audition. According to our plan of inquiry, our next step must be to find out the organic nature of the otic ganglion. Then we shall know what kind of power it dispenses.

Being a ganglion, and from that fact, and from its being directly connected with the sympathetic ganglionic chain, the nervous emission proceeding from it must be essentially sympathetic and involuntary. We have seen that it is in association with an energetic motor power, facial, and hence this must also be one of its attributes. Equally so can it distribute sensory force by the sensory connection indicated in our diagram, trigeminus. So, then, we have here a combination of sympathetic, involuntary, motor and sensory nerve-forces, all embodied in this little molecular body, the otic ganglion. Before we leave this point let us ascertain the nature of the impressions made by the otic ganglion upon the muscles moving the ear-drums. Of course its motor power must affect the contractility of the tensor tympani, for example, contraction of the muscle necessarily results, with subsequent tension of the membrane of the ear-drum, this to be followed by relaxation under the superintendence of the laxator. The motive power of the stapedius muscle is derived more particularly from the facial nerve, but inasmuch as we have seen a nervous association between this last nerve and the ganglion, an irradiation of the ganglionic or sympathetic force is conveyed equally to the stapedius and to the membrane of the internal ear-drum, closing up the fenestra ovalis that leads into the internal ear. To this membrane the little ossicle, the stapes, is attached, and its movements of tension

and relaxation also feel the ganglionic influences. Then we reach the fact that the external membrana tympani is subject to a power whose impulses are motor, sensory, sympathetic, and, like all other ganglia, involuntary and emotional, that its movements of tension and relaxation are not merely the effects of the motive force of its muscles, but that there are other and more subtle forces behind these, to which the muscular movements are subsidiary, and to which they render obedient service.

Here we are again compelled to ask the indulgence of the reader for a brief departure from our text. There is another agency that plays a most important rôle in these preliminary acts of audition, and, like light to vision and fragrance to olfaction, so is *sound* the active principle of the auditory sense—indeed, is its very pith and spirit. Our next inquiry, then, would naturally lead us to the investigation of

THE PHYSICS OF SOUND,

but, in order to appreciate the effects of various sounds upon the auditory sense, it would be necessary to familiarize ourselves with the anatomy of the labyrinth of the ear and the relations existing between sonorous vibrations and the fibrillæ of the auditory nerve, just as in the case of the relations between luminous and chromatic rays and the rods and cones of the retina. But in doing so we should leave behind us the very many objects of nervous interest in the cavity of the tympanum, to which only a passing allusion has as yet been made, but which are, and we hope to be able to show, eminently worthy of our critical consideration.

By reference to our diagram, it will be seen that the tympanic plexus constitutes a medium by which communication is established between various nerves and ganglia, otherwise remote from each other. We have already considered the contributions to this plexus by the otic ganglion, also the connection of the ganglion with the great sympathetic ganglionic chain, whereby an association is formed between the sympathetic ganglia and the auditory sense through the movements of tension and relaxation of the external drum of the ear, and by consequence through the same of the internal drum, every one of whose movements, however insignificant, makes its impression upon the labyrinth of the internal ear, and upon its occupant, the auditory nerve. Let us give a name to this interesting nerve combination and call it the *sympathetico-auditory by otic ganglion and tensor and laxator muscles of the external and internal membranes of the tympanum, or ear drums*, and simplify it by a diagram as follows:

Sympathetico-auditory association, by 1st, Otic ganglion to great sympathetic ganglia. 2d, Otic ganglion by its afferent nerve tentacles to 3d, Tensor muscles of external and internal ear-drums. 4th, Action of muscles upon external and internal ear-drums. 5th, Action of same upon the pons ossicularis. 6th, Consequent action of same upon labyrinth of the internal ear, and 7th, Upon its occupant, the auditory fibrillæ. So then we trace the effect of a sound upon the external membrane of the tympanum, not only to the internal membrane, and consequently to the auditory fibrillæ, but can follow the impulse of that sound running through every link of the whole sympathetic chain, and see it vibrating through every part of the body wherever sympathetic ganglionic power exercises its control and holds potential sway. Another association, as seen by reference to our first diagram, is that existing between the otic ganglion, and consequently the great sympathetic ganglia, and the great motor nerve of the face, the facial nerve. This association is a complicated one, inasmuch as it involves the investigation, not only of the facial nerve—portio dura of the 7th in its motor operations upon the face, and its expressions through its numerous connections with the great sensory nerve of the face—the trigeminus—but also because of that peculiar and most important offshoot from its body, known as the chorda tympani, which, in its descent from the cavity of the cranium, and through the petrous bone on its passage onward to its destination, the muscles of the face, it despatches across the cavity of the tympanum, insinuating it most strangely between the two ossicles of the pons ossicularis, the malleus and incus, hammer and anvil, causing it thereby of necessity to be more or less affected by the vibrations of these bones when under sonorous influences, and too producing remote impressions to which we will call special attention by-and-by.

We will follow up this nerve presently, and see if we can find any links of association between it and the senses of hearing, vision, olfaction, taste, and finally the innumerable expressions of the face, or so many of them as are evoked by sonorous impressions. That the facial nerve is essentially motor is easily proved by, first, its organic structure, white nervous matter, its comparative low grade of vitality, its origin from the motor nucleus of the medulla oblongata and pons, and by abundant experimental evidences. Pathology, too, lends indisputable indications of its motor quality as seen in facial paralysis resulting from disturbance of its integrity in any part of its course, whether intra or extra-cranial. Its very many associations as it passes along its devious course, through the winding passages of the petrous bone, with the auditory nerve, with Meckel's ganglion, otic ganglion, the sympathetic, pneumogastric, glosso pharyngeal and the three divisions of the trigeminus, all attest the significance of its motor stimulus, and its vivid and

animating contributions to their several functional properties. Before we leave the cavity of the tympanum to look after the chorda tympani and other extra-cranial nerve associations, this pertinent inquiry occurs to us: Why does this curious reticulation of nerves, bringing with them such various powers, and from so many sources, occur in the cavity of the tympanum? What is the cavity of the tympanum, and what are its uses? The books describe it as a hollow space, filled with air, supplied by the open mastoid cells and the eustachian tube, by which it is made to communicate with the nostrils, pharynx, larynx and mouth. This open cavity filled with air is, as we know, necessary to the free action of the ear-drums and to sonorous vibrations. Is that all? Is sonorous vibration necessary to nerve-action here too? Did we not see that volatile pungent and aromatic vibration was one of the impulsive agencies of olfaction? That the impact upon the rods and cones of the retina, of vibratory, luminous and chromatic irradiation was an essential element of visual functional power? Are the nerves of the tympanic plexus either directly or indirectly stimulant and adjuvant of the auditory function? It must be so, or there would be no nervous convention in the tympanic cavity. This is no blind and purposeless chance, but one of the myriad marvels of our organization. It was no blind and purposeless chance that sent invisible and infinitesimal atoms rolling in boundless space and causing them to consolidate and accrete into a "Cosmos," so that every individual atom is, at this moment, a microscopic representative of the earth upon which we "live and move and have our being." The little otic ganglion and its antennæ inspire the tympanic muscles to repel and prevent hyper-intrusive sonority, just as the ophthalmic ganglion, by its ciliary nerves, inspires the iris and the other tutamina of the ocular globe, to repel and prevent hyper-intrusive luminosity. So do the other nerve emissaries from Meckel's ganglion, from the great sympathetic, the facial, the glosso pharyngeal, the pneumogastric and the chorda tympani, all give to the auditory sense contributory power, receive vibratory sonorous impulses, and unite in one harmonious whole, the special senses of olfaction, vision and audition, sympathetic, involuntary and ganglionic force, facial expression, and, as we shall presently see, through the action of the chorda tympani—gustation likewise. Now let us inquire into the organic nature and functional properties of that very remarkable emissary from the facial nerve to the tympanic plexus.

THE CHORDA TYMPANI.

Although this nerve owes its nativity essentially to the facial, and is therefore motor, yet physiological experiment, as well as pathological or morbid invasions of its nervous matter, demonstrate the fact of its possession of sensory attributes, and also, because of its ultimate association with the lingual nerve of the special sense of gustation in addition to its other qualities. According to anatomists and physiologists, the sensory properties of the chorda tympani are due to a link of association between the facial and auditory nerves by which they are united as they lie side by side in the meatus auditorius internus of the petrous bone. The name given to this link is, as we know, the "portio inter duram et mollem"—link between hard and soft—or the intermediary nerve of Wrisberg. Mark this link between the auditory nerve, the special sense of hearing—and the facial, the great motor and expressional power of the face, and the union of these two with the sense of taste by the chorda tympani, as we shall presently see, and shall have occasion to make of it a very significant application. We have seen the organic nature of the chorda tympani, and its inheritance of motor and sensory power. That it leaves the parent trunk of the facial, enters the cavity of the tympanum, insinuates itself between the malleus and incus, and makes its exit from the cavity, soon after which it *meets the gustatory nerve, and communicates with it. It then joins the submaxillary ganglion*, to be finally lost in the substance of the tongue. Mark here the union of motor power, sensory power, *of two special senses—audition and gustation, and all through the chorda tympani.* What is the meaning of that curious transit of this nerve across the cavity of the tympanum, and its insinuation between the two ossicles of the pons ossicularis, the malleus and incus? These bones are in almost perpetual vibration from external sonorous impressions. Every agitation, contraction and relaxation of the external drum causes their oscillation. Does the chorda tympani feel these movements, and is there a molecular agitation of its nervous matter from each one of them? See what a strange thing presents itself here! One nerve-force, the olfactory, demands *odorous emanations* to animate its activity—another, the optic responds to *light* alone—a third, the auditory, can be awakened only by *sound* and *sonorous vibrations.*

Does the chorda tympani need *sonorous vibration and mechanical oscillation too* for the projection of its nerve-force, and finally *what is the nature of its nerve-force?* If there be even the shadow of truth, the merest "vraisemblance" of physiological fact, in the idea we recently advanced respecting the electric polarity of nerve transmission because of molecular apposition or juxtaposition, then may we not be at liberty to declare that the quality of the nerve-force projected by the chorda tympani is electric. Then, as latent electricity is liberated by the effect of friction, so does the agitation of the nerve by the vibration of the ossicles of the pons ossicularis

under sonorous impressions, extend to its own molecular structure, and thus equally liberate its own neuro-electric force. Now comes the crucial question, Does the chorda tympani impart a specific stimulus to the sense of taste or not, and if so, what is the nature of that specific stimulus? Pathology answers this question abundantly by the effects of paralysis of the facial in which the chorda tympani is involved, the paralysis inducing loss or impairment of taste in the anterior two-thirds of the tongue. The books upon physiology sufficiently illustrate all the physiological attributes of this nerve so far as ordinary taste is concerned, and to them we would refer the reader. But there are other gustatory influences to which no reference is made, and it's our business to find them out, if we can, and in default of that, and the impoverishment of our knowledge, there's no hope but in speculation, and the effort to solve the difficulty by rational deduction and argument.

This must be left to our next article upon this interesting subject. So we take leave of it for the present, and of our reader, with the presentation of a social picture by which he will recognize many familiar scenes in which these curious and mysterious nerve-forces within us have played their part, and have given to him so many of the enjoyments of social life, and its sometimes dangerous allurements and fascinations. In this picture there will be no place for the sour ascetic who said that "life would be endurable but for its pleasures." In our character as scribe and reporter let us get out of this cold, whistling wind and driving storm, and look into this warm, cosey room, curtains drawn close, fire bright and genial, host hospitable, hostess, well, perhaps better to have the choice of regretting her absence—at least to the host! Because, you see, we are here to study, not so much the "elegantiæ" of life, as to give the opportunity to man—selfish animal that he is—to enjoy to the full these gustatory appetites that begin at the tip of his tongue and continue all the way down to his pylorus. Around the table a few—not too many—of the "lords of creation," and supposed to be in mutual social harmony. *No politics!!* Now a pause for the filling of the inner man. For that pleasant process what have we to thank—we'll see. Presently, as the savory morsel and the generous juice of the yield of the vintage, float over these lingual papillæ and glossal nerve-tufts, there'll suddenly flash out "un equivocque un peu risqué," as the French môt has it, or in our native vulgarism a joke a little "off color," quite admissible, you know, through the prevailing license of "modern society," so there's no fear of a violation of "the proprieties." And so the fun that's "wont to set the table in a roar" waxes fast and furious.

What have we to thank for it? First of all, these biogenic critical cells, the alembic wherein the brilliant quip and the vivid "rèplique" are distilled and sent on through the highways and byways of corona radiata, association fibers, ganglia, and radiating here and there through efferent nerves, to be communicated by articulate speech. Then sound is awakened and knocks at the outer portal of the ear. It runs along the bony links of the bridge we have already crossed so often, and again knocks at the inner door to be admitted to the home of audition. Then through tympanic plexus, chorda tympani, auditory fibrillæ, facial, glosso pharyngeal, trigeminus, pneumogastric, hypoglossal nerves, sympathetic ganglia and all the innumerable threads and tendrils, interwoven and interblent here, there and everywhere, the magic chords of social sympathy are touched, and eye answers to eye, ear to ear, heart to heart and hand to hand. Then it may be music will lend her charms and song will crown the feast. In the days to come the memory of it will live in the words of Erin's favorite bard, genial and lovable "Tom Moore":

"Farewell, but whenever you welcome the hour
That awakens the night-song of mirth in your bower,
Then think of the friend who once welcomed it, too,
And forgot his own griefs to be happy with you.
His griefs may return, not a hope may remain
Of the few that have brightened his pathway of pain,
But he ne'er will forget the short vision that threw
Its enchantment around him while ling'ring with you.

"And still on that evening, when pleasure fills up
To the highest top-sparkle each heart and each cup,
Wheree'er my path lies, be it gloomy or bright,
My soul, happy friends, will be with you that night,
Will join in your revels, your sports and your wiles,
And return to me beaming all o'er with your smiles;
Too blest, if it tells me that mid the gay cheer
Some kind voice had murmur'd, I wish he were here.

"Let fate do her worst, there are relics of joy,
Bright dreams of the past, which she can not destroy,
Which come in the night-time of sorrow and care,
And bring back the features that joy used to wear,
Long, long be my heart with such memories filled,
Like the vase in which roses have once been distilled;
You may break, you may shatter the vase, if you will,
But the scent of the roses will hang round it still."

And now we'll hang our picture on the wall and let it tell its own story.

Local Chloroform Anæsthesia.—In the *Medical Press* for November 18, 1891, a correspondent reports the following method of producing local anæsthesia:

During the past winter I removed a small tumor from the hand of a nobleman in Rome, having first frozen the part by means of chloroform applied by spray. Unwilling in this case to administer it internally, and anxious to try its effect externally, I sprayed his finger for about ten minutes with chloroform. Before commencing the operation the finger became quite cold, and felt like a piece of ice. The removal of the tumor subsequently was not felt by the patient. The chloroform did not produce any effect on the circulation nor on the nervous system. The operation lasted about five minutes, the patient declaring he felt nothing. I drew the cut surfaces together with silver wire, which I removed on the fifth day, the part healing by first intention under carbolic acid lotion.

LIFE—SOME NEW PHYSIOLOGICAL VIEWS.

SECOND ARTICLE.

BY B. F. PALMER, LL. D.

"You do but read between the written lines,
The higher graces of unfulfilled designs."

THE above beautiful couplet was addressed by our sweet bard, Whittier, to his friends who cheered him on his eightieth anniversary; and I may well quote and address the spirit of the poet's sweetest lines to the friendly readers who have favorably noticed my article, "Life," which appeared in the October number of this journal.

That article was written at the highest speed of the pen, with no thought of publication at the time, and was only a skeleton of *half* of a doctrine, with a passing allusion to the other and more important half. This being the fact, I have been much gratified to notice the favorable comment of professional men who read so well "between the written lines," and expressed a desire to see a second article. It was my intention to present, next in order, an article written in the year 1882, entitled "An Hypothetical Case." That article recorded the true condition of a system as it was found in 1882, *after ten years of transitions and developments in the organism*, which are without a parallel so far as I am informed. Still I held it as hypothetical ten added years, to the present time, in order to question and hold subject to change anything that might at the end of twenty years demand attention. The last period has only confirmed the views formed, as continued processes have increased the mystical phenomena; hence, in October last I set forth imperfectly, in part, the doctrines concerning lymph, and new truths discovered of the nervous system.

Not having time at command to copy that long article for publication, I think that some further information on the points so hastily touched upon (leaving more to be inferred than was written as to my exact meaning), may well supplement that article, and thus prepare the mind for the more convincing argument which will show the grounds upon which the doctrine is based.

In starting with the sentence, "Life is the gift of God," the reader could not fail to see that there must have been much in mind not hinted at, and that the matters presented were concerning the *maintenance of life* rather than life itself. Ingestion, digestion, assimilation, nutrition and egestion were touched upon, but the spiritus-psychical organisms, the brain and nervous systems, had little attention, although there was enough stated to suggest what, unsaid, was well in mind as to the superior powers of the human brain and its nerves. I wish distinctly to state that when I commenced the processes and experiments twenty years ago I had not the remotest thought of formulating a doctrine; but sought *simply and solely*, relief from the pains (and worse than pains) of thirty-eight years. It is held that the lancinating pains in the ends of severed nerves so troublesome in sensitive stumps, of amputated limbs, indicate structural disease; or at least a chronic condition from which relief is possible only by removing the troublesome nerve-ends. I soon found that the pains (sometimes unbearable) were purely functional—that the nerves were in a state of perfect integrity, and with unerring certainty performing the functions of internuncial messengers to and from the sensorium. But it took a long time to demonstrate the fact, as there was such an abnormal condition of all the tissues as rendered progress slow; and until the pains all ceased and a pleasurable sensation took their place there was no evidence of the important truth. The evidences are now of years' duration—the pains gone, the pleasurable feeling constant. The motory nerves, from the brain to the foot—or the mutilated end of a limb if a part is gone—stimulate to action all the dynamic energies in their course. If organs, muscles or tissues of any kind in the line of that nerve are abnormal the fact will be disclosed by inaction or by painful and improper action; and the information of the failure to produce the normal results that should follow in response to the will-mandate, returns on the same nerve (I shall assume) as, generally, the motory nerve forms a loop at the peripheral point and returns on itself, so to speak, as the sensory nerve. And herein we see the analogy with the veins and blood-vessels. The blood goes out through the vessels to empower the tissues to *nourish* them, *move* them, and we call it arterial. It finishes its dynamic service at the capillaries, and flows back; then we call it venous. But it is the same blood in arteries and veins flowing out to transport lymph, oxygen and the white corpuscle (to be extracted from the capillary) and flowing back for more of the vital properties. The artery and vein are one conduit with a little *heart* in the middle point. I imagine that the nervous fluid is the same in the motory and the sensory nerve, but as there is a continual expenditure of the nervous force it is possible that at the peripheral extremity, where the motor becomes the sentient filament in the terminal loop, there may be a change analagous to that in the blood at the capillary. The two filaments which are separate in the spinal canal, may be one at the periphery and in the centre, the loop and the ganglion. In my "Hypothetical Case" the principal seat of pain was far from the apparent seat, but the abnormal condition of the latter presented obstructions in the passage of the response by reflex action. The tegumental covering of the tibia, fibula and their nerves had, in disuse

thirty-seven years, become almost horny, but lymph has now so completely transformed it that the tissues are almost—

"Soft as sinews of the new-born babes."

The pains are all gone, and pleasurable sensations now attend the sensitive nerves. The mystical fluid was accredited by Aristotle B. C. 350, and called *Spiritus*. It has never been seen, but always recognized in some form as *Pneuma*, *Animal Spirits*, or *Nervous Fluid*. All accept it as the element nearest to, if not the spirit, and I do not see that it is essential to know more than that it is the most refined of all the fluids, and that in some way, from the brain and through the nerve centres, ganglia and filaments it pervades all the organism. It is to the higher organism, the cerebro-spinal axis, what lymph is to the organic, or sympathetic systems. Bichat, the greatest of anatomists, claimed a "Nutritive exhalent," which, as a vapor of lymph, appears, in its way, to stand as the counterpoise of the nervous fluid. With the fluid of Mesmer, and the od of Reichenbach I shall spend no time now, nor will I discuss the *faith cure* and *mind cure*, as I design to present my doctrine as a purely physiological evolution. Having presented my view of lymph and the nervous fluid, one the nutritive element of the organic system, the other the vital spiritus of the cerebro-spinal axis, I have now to add that I recognize a central *cranial eye* in the optic commissure, above all the sentient nerves of the organs of special sense. It seems to be illuminated by the light of that heaven of the cerebrum, the *corpus callosum*, which La Peyronie thought to be the seat of the soul. The optic organism, with its two outer eyes and one *inner eye*, in one nerve, seems to be the spiritual microcosm set above the sentient ganglion where the ophthalmic, the olfactory, the auditory, the gustatory, with the nerves of touch, from the entire skin, harmonize and issue mandates over all the nerve-lines. By the aid of this inner eye we may see all the sinuous ways of the sensory-sentient messengers of the mind. The optic commissure overlooks the ganglia of Gasser and lights the sensorium where the sentient, five-fold organism acts by the consensus of the various members in issuing will-mandates. To possess and exert the utmost potential powers, these will-mandates must be sent on *visible* nerves; that is, the nerves must be seen by the "single" eye, that the *spiritus is moving on seen lines*, and the part to which the fluid is sent is sensibly recognized as the objective point to which the internuncial messenger is sent to give dynamic impulse, and return an account of the action of the motors.

I am now at the last point of my strange doctrine, and the one which will probably cause the man who has thus far read with small faith in it to reject the whole, when he sees to what the steps have led. But bear in mind that I have for twenty years argued "This can not be," then tell me, if we both survive twenty years, at the end of the same term of years if *you* can reason it away. I can not. To prepare the mind for my assumption that the brain is a dual organ, with its spirituo-psychical ganglion at the top of the spinal column, and its dynamic seat of motory power at the foot of the column, in the lumbo-sacral environment, I wish to call attention to the language of Bichat, who, in speaking of the spinal ganglia of the cerebro-spinal axis distinguishes them as "*little brains.*" The great glands of the region mentioned constitute the dynamic brain, which is in touch with the sensorium by the "white" fingers anointed with the "gray" oil. The mandate from the brain for locomotive impulse passes this great chamber, and from it receives the command which, if to the lower limbs, goes out from the sacral plexus upon the two sciatic and other nerves, to the foot. Here is the grand *working* brain, antipodal in place and function to the encephalon, and still in instant sympathy with it. An *organized thought sent from the sensorium to and from this dynamic brain will plow through indurated teguments, tear apart false adhesions, expand atrophied muscles, distend contracted fasciæ, and tone the sinews that have become as "strings of steel."*

But, to develop the great internal motors, as the psoas magnus and iliacus muscles, when atrophied or where, from any cause, there is arrested development, the pelvic brain must call to its allies, *the receptaculum chyle, the great lymph glands and the mesenteries of the alimentary canal for lymph.* The call will have direct response from all these receptacles, and in addition it will have response immediately, almost, through the thoracic duct. The lymph (not chyle) in the *receptaculum* will gush to the subclavian vein, through the vena cava, the heart, the lungs; back to the heart, out the aorta, and down to the required point (with its oxygen giving the scarlet tint) ready to join, when transuded from the capillaries, the *free lymph* nourishing by exosmosis. Now the dynamic brain fires the lymph to action. The sympathetic nerve system has its rise in the little ganglion of Ribes, above that of Gasser, and sends its dual ganglionic chain down the sides at some distance from the cerebro-spinal ganglia, but it sends filaments to all of the ganglia of the spinal column; thus, the two systems unite in one, and in the lumbo-sacral organism the two intercommunicate freely. I regard the recognition of the dynamic brain as of primary importance in all exercises calling for the full power of the motors. It augments the usable energy immensely, as I am prepared to demonstrate.

CLINIQUE.

LEPRA AND NOT SYRINGOMYELIA NOR MORVAN'S DISEASE.

By John Arschagouni, M. D., New York.

House Physician at Five Points House of Industry Hospital for Children.

HIS Excellency Dr. Zambaco-Pacha, of Constantinople, read before the Paris Académie de Médecine, on August 23, 1892, a most elaborate paper: "Les lépreux dela Bretagne en 1892."

He demonstrated by facts and the Academy concluded that Morvan's disease and syringomyelia, so much spoken of lately, are no more than *lepra* in its different phases, *i. e.*, mutulante, nervous, anæsthesic, ulcerous or even tuberculous varieties.

It is claimed by some that lepra became extinct since the VII. century, on the other hand in its place Morvan's disease was discovered, a very peculiar coincidence! Is it probable that a disease such as lepra, which caused terrible ravages in the Armorique for centuries past, could so suddenly disappear, particularly from these regions? Dr. Zambaco-Pacha in the historical study of the disease, found leprous or leprous descents (known also as kakous, cagots, caqueux) up to the XVIII. century. In several localities there are places called *Roz-an-c'hlan*, simply meaning sick house or leprosarium; *Ar-c'hlandi*: bridge for the leprous, etc. The present state of lepra in Bretagne, fortunately is not the same as in XIII. or XVI. centuries, when only in France existed two thousand leprosariums. It is, on the contrary, in a disseminated sporadic state, without a tendency of spreading and generally very benign.

Dr. Zambaco-Pacha has nevertheless found some worse cases similar to those he had seen in the East with large ulcers suppurating for fifteen to twenty years, with leonine figure, fatally condemned to a progressive destruction of the most important organs of the face, mutilation of hands reduced to shapeless, useless, embarrassing stumps. He also exhibited before the Academy numerous photographs of the varieties he observed in Bretagne, thus giving an opportunity to the members of the Academy to compare them with those leprous cases of Constantinople.

The first two were of typical mutilating form, the fourth case presenting the typical anæsthesic form of Danielssen, the fifth and sixth considered to be cases of Morvan's disease, while they are for Dr. Zambaco nothing but two true specimens of mutilating lepra. No wonder, he says, we often observe in Bretagne—this great center for leprosy in the past—the so-called analgesic panaritum. The claw (griffe) with amyotrophy, retraction of fingers, anæsthesia and trophic troubles, absolutely similar to lepra of Danielssen. The No. 7 and 8, the former is of ichthyoso-ulcerous variety, the latter of tuberculous. Another photograph presenting a nervous variety with disfiguring process of the fingers.

Dr. Zambaco-Pacha has seen at Bicêtre and at Salpêtriere the cases reported as Morvan's disease in medical literature. After a careful examination he declared them to be simply cases of classical or somewhat attenuated or defaced leprosy. As for the cases known as syringo-myelia, they are nothing but varieties of lepra of the nervous type. Such an elimination totally throws out the syringo-myelia, as we find described by Dr. Charcot as a separate disease, with *Morvan's type* (mutilation of fingers) and with *claw type* (amyotrophy, trophoses, etc.). Mr. Dejérine, who had always admitted the syringo-myelia as a separate malady from Morvan's, after Dr. Zambaco's explanations and demonstrations, admitted that it could be the lepra.

The cases known as syringo-myelitis, with semi-flexed condition of certain fingers, specially the last, second or third, similating thus the claw, are no more than cases of leprosy of the nervous variety, without nodules nor specks—Danielson's true anæsthesic leprosy.

Dr. Zambaco spoke of a peculiar case of a young Haitian, now in St. Louis Hospital, under Dr. Hallopeau, who does not exhibit other symptoms but that characteristic claw, with atrophy of muscles of the hand and anæstbesia. Had this case been in another hospital, where chances are little to observe lepra, they would have taken it for a case of syringo-myelia. He mentioned in his paper another case, which for nearly seven years had been considered by the clinicians of the different hospitals in Paris as the most true type of Morvan's disease. Prof. Hayem and others, after long observations, reported the case to be such. Dr. Monod has successively amputated several of his fingers, due to necrosis, and published his observations with Dr. Raoul in the *Archive de Médecine and de Chirurgie* as being Morvan's disease.

Later on he entered Tenon Hospital, where more fingers were amputated. Dr. Broca spoke of this case in the *Gazette Hebdomadaire* again as Morvan's disease. The case was taken again to Saint-Antoine, in order to amputate some more of his fingers. Thence he was taken to Salpêtrière, where he remained for eleven months. Thence to the Protestant Hospital of Neuilly, and thence to Bicêtre, where he was kept for several months, all with a diagnosis of Morvan's disease.

This case is minutely described in almost every medical journal, and in all thesis written on this new disease, it is stated as a typical and the most perfect case of syringo-myelia, or of Morvan's disease.

Dr. Zambaco stated also that Dr. Gombault, an expert, examined with patience and ability, and with every means he possessed, the amputated portions of fingers, and he never found a bacillus nor the large cells of leprosy. Dr. Zambaco said that he diagnosed this very case as a mutilated variety of leprosy. The physicians of St. Louis Hospital discussed this case on consultation, and unanimously decided it to be a good case of leprosy.

Dr. Zambaco's conclusions are as follows:

1. That the lepra exists actually in an autochtone state in Bretagne in various forms—*mutulante, anœsthesic* of Danielson, or nervous, ulcerous, and even tuberculous. This is the survivorship of the antic lepra, which made ravages in the armorique for several centuries. It is still existing simply by atavism.

2. That all these physicians who studied leprosy are of his opinion, especially notorious physicians in the marine service, who not only closely studied lepra, but most of them have been superintendents of leprosariums in the colonies. They also surely admit the survivorship of lepra in Bretagne.

3. That in Bretagne, the lepra often keeps all its classical characters when it becomes an easy task to diagnose the trouble, but in a majority of cases it is slight, incomplete, attenuated, so to speak, defaced and consequently unrecognizable for those who have not the requisite experience. Such cases of lepra exhibiting only one or two signs are observed also in other localities where the lepra is in existence, *i. e.*, in Turkey and in colonies, etc. In fact it often happens that the anæsthesic form of lepra stops in its first period for several years and even for good. The same is true for the mutulante variety, after the loss of one or two fingers. The nodules or tubercles and the pigmentary patches upon which up to this time is based the differential diagnosis between syringomyelia or Morvan's disease and the lepra, may be absent even in the actively leprous centers. Their absence should not allow us to exclude leprosy.

4. That the autochtone lepra exists every where in Europe, in Portugal, Spain, Italy, whence Dr. Ferrary writes to him that he has two hundred leprous cases under observation; in Roumania, Russia, Scandinavia, Greece and Turkey. There are centers of leprosy in the South of France, near Nice, at Vitroles, at Martigues. He thinks it exists also in the department of Pyrenees, amongst the *cagots*, who, same as the kakous of Bretagne, are but of leprous descents. The lepra is in existence, sporadic and disseminated from everywhere in France and in all Europe. Prof. Brousse (of Montpellier) has observed it in autochtone state in this city. Dr. Thibierge (of Paris) brought before the Société Médicale des Hôpitaux, a case of leprosy which had been treated for six years in different hospitals without knowing the true nature of the trouble.

5. The pareso-analgesic or Morvan's disease *is not a new malady*, but a remainder of the lepra which existed in Bretagne, and little every where in Europe for centuries. In fact, after making its ravages in Armorique to the extent of obliging the government to build numerous leprosariums on the shores of every city—the parish of Saint Briene only had twenty-three—the lepra could not disappear completely without leaving any trace of its lugubrious passage. The names of *kakous, caguets, cagnets, cahets, cagots, cordiers*, etc., are still found in the Breton vocabularies, and the traveller always finds in the departments especially of Finistere and of Morbihan, an old leprosarium or cordery, or magdelaine, or a cemetery for rottens, or a bridge for leprous, or a hole or heath of leprous, etc. The popular songs still freshly reminds the terrible souvenirs of the misfortunate leprous.

6. Morvan's disease is nothing but the lepra of mutulante variety which sometimes follow its full course, but at others, being mild and attenuated, stops in its first steps and thus the change.

7. By syringomyelia, as it is constituted to-day, it is understood to be a dissimilar malady, which needs to be differentiated. Most of the cases of syringomyelia, seem to him, to be attacked by anæsthesic lepra of Danielssen, in certain cases more or less attenuated.

I have witnessed while in Constantinople, most of the leprous cases of Dr. Zambaco-Pacha, who is one of my best personal friends, and I have great respect for him as a genius and scientist.

He has demonstrated, in spite of some contradictions, that lepra is not a contagious disease. His recent remarkable communication to the Academy opens a new field of study. Some time ago he wrote me a letter of which I give a résumé:

"My dear Dr. Arschagouni,—I forward you to-day* by mail 'Les Lépreux de Scutari,' an extract from, my recent work on lepra, 'Voyages Chez les Lépreux.' I know you will read it with interest. I wrote, as you know, several *mémoires* on leprosy as observed in the East, and I am actually preparing a monograph upon the same subject. Could you tell me if there is lepra in New York? It must certainly be there, too.

"I would very much like to have the opinion of American specialists upon leprosy. Could you get them for me? What do they think of heredity in lepra and of its contagion? I know all about leprosy of the Sandwich Islands and of the case of inoculation of a condemned to death, etc., etc. But all these are not scientifically demonstrated, and we have to be very strict in such matters.

* While in Constantinople, my native city, Dr. Zambaco kindly presented a copy of his other work, "La Lépre Observée à Constantinople," illustrated with colored plates. Published in Paris by Masson, 1887.

"During my thirteen years of observation of lepra in Constantinople I have not met one case of contagion. In Constantinople, as you know, only native Jews have the lepra. There are no Constantinopolitan leprous amongst Greeks, Armenians nor Mahomedans, and yet there are four hundred ambulant leprous in Constantinople doing all kinds of work and circulating everywhere. They are native Jews, emigrated from Spain during the time of inquisition, and since then they live ethnically isolated—that is, they form matrimonial union between their nation, without melting, amalgamating themselves with other nationalities of the country, as you are perfectly aware. Or they are leprous cases emigrating from the islands of Archipelago or from Anatolia, even from Armenia. Had the disease been contagious we certainly should have met cases of leprosy in Constantinople amongst the other nationalities.

"I shall feel much obliged if you could tell me amongst what nationalities lepra is observed in New York? Are there any native-born Americans who have it, and for how long have they been noticed and remained under observation? Are there Jews of pure blood, true Israelites?—because the Polish Jews are Judaised Tartares in the eighth century, and are not the genuine Israelites of the Bible. You will greatly oblige me, etc."

By giving this extract of Dr. Zambaco's letter I hope that those physicians, particularly our American specialists, who have had opportunities to study leprosy clinically, will be kind enough to furnish me with any information in reference to this disease as observed in the United States or elsewhere, trying meantime to include in their information the replies to those questions the doctor is anxious to know.

I shall thankfully receive such information, and will submit them to my friend, Dr. Zambaco-Pacha, who, I am sure, will highly appreciate such contribution made to medical science.

252 East Broadway, New York.

DIETETIC THERAPEUTICS.

Nourishment in Acute Disease (Francis H. Williams, M. D.)*—There are few questions in the treatment of disease which have to be decided so often during the daily routine of practice as those which concern the proper support and nourishment of the patient, and, further, there are not many things connected with the care of patients which are so difficult.

It is not easy to find a person competent to prepare suitable food; it is, therefore, the more incumbent upon the physician to be able to give proper directions as to its preparation.

The chief thing is to take pains, and those who can do this are rare people, whether physicians, relatives or nurses. This is why less is accomplished than there should be in the support of the sick. If we wish to succeed in avoiding nausea, vomiting and loss of strength and even loss of life, we must learn to offer nourishment to our patients in a suitable form.

It will be my endeavor to recall to your minds a few of the principles to be kept in view in feeding patients acutely ill.

Food may be classified as follows:

(1) Water, (2) Salts, (3) Fats, (4) Sugars (Fruits), (5) Starches, (6) Albuminoids.

The classes of food known as starches and albuminoids are the ones which require the most care to offer to a patient in a proper form.

Water is of prime importance. Consider for a moment the composition of the body of a man weighing 154 pounds, as illustrated by these blocks. He is 108 pounds water, or about two-thirds.

It does not follow from this that we need give every patient several pints of water a day; by no means; but it is fair to infer that water of a suitable temperature should not be denied the sick, and that patients too young, too delirious or too ill to ask, should not be neglected in this regard. The physician should see to it that water is offered the thirsty economy in all cases, nature demanding it though the patient makes no request.

Salts are present in small proportion in most foods, and are essential constituents of our diet.

Fats as a rule are not tolerated by patients acutely ill, and their use should be limited to such forms as are finely divided, as in milk or yolk of egg (and even in milk it may be necessary to reduce the amount of fat by skimming off the cream).

Common Sugar is rapidly and perfectly changed into grape sugar and into maltose before it is assimilated.

Grape sugar and maltose are very soluble and easily absorbed, and for this reason seem a very desirable form in which to give nourishment. Horlick's and Mellin's foods are examples of preparations made up chiefly of saccharine substances.

Fruits are valuable to give variety to the diet and to contribute water, which they contain in large proportion. Most fruits contain eighty-five to ninety odd per cent. of water, some sugar, and the citrates, malates and tartrates of potassium. Other fruits, such as grapes and bananas, contain sugar in considerable proportion, to twenty per cent., and their value as foods is not to be despised. Among dried fruits, dates and figs contain sixty per cent. of sugar and six per cent. of albuminoids.

The value of certain fruits for persons who are predisposed to uric acid, gravel and concretions in the bladder, I shall not discuss here, though it is well worthy of attention.

Though we take foods into the stomach in the solid form, it is necessary that they be made soluble before they can be assimilated. The classes of foods which we have thus far considered are readily absorbed, namely, water, salts, fats and sugars; they are all liquid or readily soluble substances. In the remaining classes, starches and albuminoids, we have foods with which there are several steps to be gone through before they can be taken up by the system.

With all starchy foods, like grains, potatoes and rice, it is necessary to break the starch granules by heating or some other simple process, and before the starch can be absorbed it must be converted into a soluble substance, such as dextrine, which is the same in composition as starch. Starches, therefore, are not absorbed as such, but must first be rendered soluble.

Uncooked starches vary very much in the rapidity with which they may be converted into sugar by the action of the saliva. The starch of Indian corn is converted in three minutes, whereas wheat starch takes forty minutes and potato starch three hours. After thorough cooking, all starches require nearly the same time. It is, therefore, important to have starchy food well cooked before it is given to patients.

* Read before the Massachusetts Medical Society, June 10, 1891, and recommended for publication by the Society.

Arrow-root forms by cooking with water a mucilaginous liquid, not a pasty mass; it is, therefore, not apt to irritate the stomach and intestines. It should, however, not be used alone for more than a few days together, as it contains too little of the other constituents of a proper diet. In this it differs from rice or potato or bread, which contain gluten, salts and fats in addition to starch. Rice is better steamed than boiled, as it loses to boiling water much that is valuable. Boiled potatoes are for the same reason less nutritious than baked ones.

As regards *albuminoids*. Wholly without albuminoids, unless the disease is of short duration, the patient can not exist. Since they are imperatively needed, they should not be omitted from the diet, even where digestion fails almost completely.

Albuminoids are complex in composition and decompose readily, and in their preparation more care is required than with any other kind of food. To avoid decomposition, they should always be fresh; and to prevent losing the albuminoids by coagulation, they should not be heated to too high a point.

To prepare meat foods properly two things must be borne in mind. (1) Albuminoids, as a rule, coagulate when heated to boiling. (The casein of milk is an exception to this.) (2) To obtain a good meat flavor the meat must be subjected to a temperature much above the coagulating point of albumen. It is, therefore, necessary to resort to two procedures, one which has for its object to extract the flavor, the other to extract the albuminoids without coagulating them.

If we treat meat with boiling water we get beef-tea, which contains only a small percentage of solids and almost no albuminoids. This applies to all clear beef-tea. Beef-tea is of service in two ways; its taste and odor are agreeable, and, together with the heat of the hot water, which acts as a stimulant, it makes a valuable article for use in the sick-room. Not as a food, but as a flavoring.

Some of the extracts of meat made with hot water may be used instead of ordinary beef-tea, thus saving much time. Liebig's and probably similar extracts of beef contain no fats, gelatine or albumen. It is desirable to use only a small amount of extract, say one-third of a teaspoonful to a tea-cupful of hot water, as too much gives an unpleasant flavor.

Now as regards the juices of meat which contain albuminoids in solution.

From raw meat one can not obtain as much juice as is easily expressed from the same amount of meat which has been previously heated. The reason is this: The envelope of the muscular tissue is a substance similar to gelatine, which swells and dissolves when heated, and thus after broiling the liquid portions of a steak flow out more readily. A steak when well broiled swells; if it is cooked too long the albuminoids coagulate, it loses moisture, shrinks and becomes tough. A slightly broiled steak may be cut into square pieces, and pressed or squeezed or twisted in a piece of cotton cloth to extract the juice.

In administering beef-juice great care should be exercised to avoid heating it to 136° F., at which point its albumen coagulates in flakes. Beef-juice, though fourteen times as rich in albuminoids as beef-tea, is so raw in flavor that it is rejected by many palates. To overcome this objection, it is only necessary to add a proper quantity of any extract of beef of good flavor to make it delicious—about the size of an almond to an ounce of beef-juice. Thus by a union of two bodies, one rich in albuminoids and the other rich in flavor, we get something that is superior to either. Beef-juice is an excellent article of diet where solid food can not be given, but it is somewhat troublesome to prepare. A pound of meat yields about four ounces of juice; it therefore costs about five cents an ounce.

Soluble albumen, such as is contained in expressed meat juice, is absorbed in the rectum to nearly the same extent as complete peptones. Albuminoids in solution are not precipitated in the stomach and afterwards dissolved, except in the instance of casein of milk, which, as already said, is first coagulated and then dissolved.

Being accustomed to prescribe meat juice, I was much pleased to find a preparation of it manufactured by a well-known firm. I hoped in this to realize all the advantages of beef-juice, without its inconveniences. An analysis of this preparation, which was made for me, was disappointing, as it was found to contain only one-third of one per cent. of albuminoids, compared with seven per cent. in beef-juice; it had also more salt than is desirable—twelve and one-half per cent. This is mentioned to illustrate the advantage of using foods which are prepared at home in preference to those made by manufacturers, of which the composition is unknown. This preparation costs thirty-five cents per ounce, though it is only one-twentieth as rich in albuminoids as beef-juice costing about five cents.

If one can not conveniently get albuminoids from meat, a very nutritious broth may be made by means of hot water into which an egg has been stirred. Here we may heat three ounces of water to not above 149° F., and stir into a raw egg. The liquid is milky if we use the yolk; clear if only the white is used. It has little taste, which is an advantage with many patients, or it may be flavored with beef extract.

If one has no thermometer at hand, the temperature of the water may be determined in two ways. If the finger can be kept in the water for two seconds, or about the time it takes to count ten hurriedly, the temperature is not too high. Liquid of this temperature is apt to burn the tongue. One hundred and forty degrees F. is as hot as one can drink a liquid, and 122° F. is a very comfortable temperature for a hot drink.

When these experiments were begun it was feared that a temperature sufficient to coagulate albumen might be so low as to be lukewarm; but a few tests showed that any temperature which can be borne in the mouth will not coagulate albumen. (Though these two temperatures differ by only a few degrees.)

It is interesting to compare the composition of four liquids containing albuminoid constituents:

Beef tea	about 1½
Beef juice	about 7½
Raw egg, with three ounces water	about 5½ albumen, 6½ fats
Milk	4½ albumen, 4½ fats, 4½ sugar

In all of these we get a good proportion of salts.

It may happen that the digestive organs can not tolerate eggs, or more especially milk. But by means of powders which contain pancreatic ferments, such as Fairchild's peptonizing powders, milk may have its albumen converted into albuminoids, which do not coagulate by heat, and into diffusible albuminoids or peptones. In the ordinary process of peptonizing milk, both of these bodies are formed, but the proportion of peptones is small.

In the case of milk, which forms solid curds in the stomach, a partial conversion of its casein into albuminoids which do not coagulate, has obvious advantages. Peptonized milk is so well known that I hesitate to do more than mention it to you; on the other hand, it is so useful a preparation that I will say a few words about it for the sake of such practitioners as may not appreciate its value, especially as there are a few precautions necessary to its successful use. The powder is put in a quart bottle, with a little water; milk is added, and the whole is placed in a vessel of water about as warm as the hand. The process of partial digestion goes on while the milk is at this temperature; boiling stops it, cold delays it and preserves it. If the digestion is continued in this way for twenty minutes or more, the milk has a bitter taste. If this taste is objected to by the patient the time may be shortened to five minutes, or even less, in which case, however, the amount of artificial digestion is small. If the milk is to be given by the rec-

tum, the digestion may be kept up for two hours; in this case the milk does not curdle when acids are added to it. About four quarts of peptonized milk will support a person in health. For a patient in bed, less than this is sufficient, the amount varying with each individual.

Milk treated in this way contains albumoses and some peptones. For our purposes, we may broadly define albumoses and peptones as soluble albuminoids, which can not be coagulated by heat or dilute acids; and peptones have the further property of passing through the membrane of a dialyser, and represent a later state of digestion. Even after prolonged digestion we get in peptonized milk only a small amount of peptones, the casein being converted chiefly into albumoses.

The bitter taste of peptonized milk is not thoroughly understood; albumen and albumoses are tasteless, and peptones have a cheesy taste.

Meat albuminoids are converted by the stomach into bodies which are soluble or diffusible, and these substances, when artificially produced, have been regarded as calculated to render great service in invalid feeding.

It is known that an increased secretion of urea appears after the administration of peptones, just as it does after the ingestion of unaltered albumen, and that the chemical composition of peptones differs little from that of ordinary albuminous bodies. They have the manifest advantage of being easily and immediately absorbed. Peptones, so far as we yet know, may be used during short periods of extreme exhaustion, when perhaps few other albuminoids could be assimilated.

Many preparations have been offered for sale which purport to be peptones, but which really contain only a small amount of them. Many such preparations are soluble in water, but have a very disagreeable odor and unpleasant taste.

So much in outline for the various classes of foods.

Since acute disease is accompanied by fever, we must consider the effect of feeding in cases where the temperature is febrile in character; also, the amount of food, its quality and quantity, together with other conditions affecting its absorption.

In acute disease accompanied by fever, what are the conditions? The body loses weight, the urea especially is increased and carbonic acid and water are excreted in larger amount than in health. All of this loss is not dangerous if allowed to go on for a few days only, and if the amount does not exceed certain limits.

But to replace these losses we are at a disadvantage as regards the ability of the system to assimilate food. In fevers the appetite is small, or may be completely lost. The saliva, the gastric juice, the pancreatic fluid, the bile, are less efficient in action, or are diminished in amount, during high temperature. The stomach is very sensitive, in part perhaps through sympathy with the increased sensitiveness of the nervous system as a whole. If there is much hyperesthesia of the digestive tract, as in typhoid, in peritonitis, in dysentery or gastro-enteritis, one must be careful not to give too much food, and it should be in liquid form.

It is not, however, the administration of food, but the administration of unsuitable food, that we have to fear, and also the giving of nourishment in quantities unsuited to the digestive powers of the patient.

One should not give the patient what he can not digest, nor should we give him less than he can assimilate. The attendant must have a constant watch over the condition of the patient's powers of digestion, and carefully adapt his food to his capabilities, especially during convalescence.

Our attention should be devoted not only to what is put into the alimentary canal, but also to what goes out. For example, if curds of undigested milk are found in the stools of a typhoid patient, the quantity of milk should be diminished or it should be diluted.

Large quantities of milk are often given to typhoid fever patients, to their great detriment, and excess of zeal in feeding and too little care in the preparation of their food cause much of the intestinal trouble that complicates these cases. In diphtheria, foods which are soft in consistency, rather than liquids, may be used, as they are less apt to get into the trachea.

Every careful observer of the sick will agree that many patients are starved in the midst of plenty, simply from want of attention to the ways which alone make it possible for them to take food. For example, if the patient has a fever with remissions or intermissions, it is of the first importance to remember that the ability to digest food at these times is greater, and the more nourishing portions of the diet should be given during the remissions and intermissions.

As far as practicable, the mouth should be kept clean. The tongue may become cracked and dry. It may stick to the sides of the mouth and cause so much pain when the attempt is made to swallow that the patient refuses food which he would otherwise take. The mouth should be rinsed with water after taking food, and should be carefully cleansed with an antiseptic solution from time to time. In a word, for extreme cases the important thing is liquid food. We should give water. We should give sugars (starches have no taste, but are less readily absorbed). Fats are not tolerated. Salts are present in nearly all foods. We should give albuminoids, in beef-juice, in peptonized milk. Ordinary milk becomes solid in the stomach.

The physician should never lose sight of the patient's likes and dislikes; one can not diet a patient from a book or from the chemical composition of foods. On the other hand, it is incumbent upon the physician to know how to choose such a variety in diet as to include both what is palatable and what will afford a proper amount of nourishment.

It has been one of the aims of this paper to show that the preparation of some valuable foods is entirely in our own hands, and that we need not be dependent upon manufactured preparations, of whose composition we are often ignorant; and, further, to emphasize many details concerning the nourishment of patients which, though well-known and often repeated, are also too often overlooked.

Opinion of a Special Committee on Quarantine.—The Special Committee of the Chamber of Commerce on Quarantine has received the following report from the Advisory Committee of Physicians, which report has been approved by the committee of the Chamber, and a copy sent to Governor Flower, Dr. Jenkins and Charles Foster, Secretary of the Treasury:

We report here only the conditions under which the germs of the disease are liable to enter our country in transatlantic ships, and certain of the measures which seem to us necessary to prevent their access. The control of other infectious diseases offers distinct problems in each case.

The opinions which we have formed rest primarily upon this consideration: That under ordinary conditions there is little liability to the introduction of the germs of Asiatic cholera, either through the mails or through ships' cargoes. It is, on the other hand, through the ships' inhabitants and their personal effects that the contagion of this disease is most liable to enter.

In view of the fact just stated, we concur in the general conclusion adopted by the Technical Commission of the International Sanitary Conference at Rome in 1885, that disinfection of merchandise and of the mails is unnecessary. This general statement, however, must, we believe, be qualified when the merchandise is known to have been prepared for shipment in infected places, has been shipped from infected ports, or has been brought on ships in which cholera has occurred during the voyage. Under either of

these conditions it is our opinion that measures of disinfection should be practised. The nature of these measures will depend upon the nature of the cargo, its form of packing, and the circumstances under which it has been placed before or during the voyage. We do not think that general merchandise prepared and packed in uninfected places, in boxes or barrels, or closed packages, and which has been shipped at infected ports or brought on infected ships would need other than such an exterior disinfection as could be practised on the ship or during the unloading without injury to the goods.

We believe that the necessity for such exterior disinfection of boxes, barrels and closed packages arises mainly under conditions like those in Hamburg, where the epidemic was severe in the dock regions and the possibility of exterior soiling with infectious material evident. These considerations apply equally to mail sacks. We believe that merchandise in bales presents greater possibility of contamination from its handling by infected dock hands, stevedores, or ships' crews at infected ports, or on infected vessels, than when packed in boxes, and should, therefore, be subjected to more rigorous inspection and disinfection process than if it were closely enclosed. We are assured by our advisers that hides can be disinfected without injury.

A thorough, prolonged, intelligent exposure of rags to live steam or prolonged boiling is the only method known to us by which they may be rendered absolutely safe. We furthermore are of the opinion that at present edibles which have either been prepared or packed in infected places should be refused entry altogether. It is also our opinion that in general edibles which have been shipped from infected ports or transported on infected vessels should be refused entry unless they have been packed in close cases or packages in such form as to preclude the possibility of exterior contamination.

We are, however, not prepared to say that means can not be devised by which certain edible merchandise—sugar, for example—which may possibly have been exposed to contamination may not be rendered safe by specially planned methods of disinfection.

We have in this report limited the term "infected ship" to such ships as may have had a case or cases of Asiatic cholera on board during the voyage. In view of the fact above stated, that the greatest danger of the introduction of the germ of Asiatic cholera by sea lies in the ships' inhabitants (passengers and crew), and their effects, we believe that on arrival in port of an infected ship its passengers should be at once removed to a safe and comfortable place of detention, where they should be isolated in groups as small as practicable and held under observation.

We believe that, under ordinary conditions, the period of quarantine detention of healthy persons when removed, as they should be, at once, on their arrival in port from all known or possible sources of infection and properly placed, should be five days, in case no cholera occurs among them.

We believe that the baggage of cabin passengers arriving on infected ships should be the subject of most careful investigation as to its point of shipments, it degree of protection from the possibility of contamination while on board, and as to its condition on arrival, and that such manner of disinfection should be practised as may seem necessary to the Health Officer, in view of the facts in each particular case; special attention being paid to the baggage of those who may have taken ship at infected ports, or who have been recently staying in infected towns.

We believe that the personal clothing and baggage of the steerage passengers among whom cholera has occurred during the voyage should be subjected, during their detention, to reliable processes of disinfection; and, furthermore, that the persons of such steerage passengers should be freed as fully as may be from all possibly infected clothing and effects before they are taken from the infected ships to the place of detention. We hold the opinion that the detention of passengers of any class on infected ships for a moment longer than is absolutely necessary is unjustifiable.

We believe that the detention of passengers and the conditions of detention should be planned and maintained in accordance with the modern views of quarantine, which not only look to, but usually render possible, the speedy release, if not of all detained persons, at least of those isolated groups in which, during detention, no outbreak of cholera has occurred. It is the opinion of your committee that it is the duty of Quarantine Health Officers to fix upon some definite principle upon which the detention of passengers from an infected ship shall be based, and that the passengers should be immediately informed with such detail, as their degree of intelligence may jusify, exactly what the purpose of the detention is and when, under favorable conditions, it may reasonably be expected to come to an end. We urge the importance of this matter, not only on humanitarian, but on obvious scientific grounds.

This committee is convinced from the personal observation of some of its members and from the history of the older quarantine methods, that it is possible under favorable conditions, by the employment of vigorous means of local disinfection on the ships, combined with the immediate removal to separate places of the dead and fresh victims of the cholera, and of those immediately associated with them, largely to control, and even ultimately to stamp out the disease without the removal of passengers from an infected ship.

But we believe, and wish to lay special stress upon this point, that the pursuit of this method usually, if not invariably, involves the sacrifice of human life, extreme and prolonged mental and physical suffering on the part of the passengers, and such an unnecessary detention of the infected ship as is seriously detrimental to the pecuniary interests of her owners.

Your committee recognizes the necessity of the temporary employment of this severe and costly method of quarantine, when the provision of facilities for meeting in any adequate measure an emergency like the present one in New York has been wholly neglected. But when it is possible, by the judicious and intelligent use of the facilities at the command of the Health Officer, or the facilities which in a great emergency may be furnished by an appeal to the resources and humanity of the authorities and the people, to immediately remove all passengers from an infected ship and detain them in isolated groups for observation, any other course than this is, in the opinion of your committee, wholly unjustifiable.

We wish to remind your committee, and to suggest to those who are disposed to indulge in indiscriminate criticism of the management of the Quarantine affairs at the port of New York, during the past few days, that the emergency has been one of almost unparalleled magnitude and the complication of circumstances of a most perplexing character.

We believe that the disinfection of a ship in which, during the voyage, a case of Asiatic cholera has occurred, can not be, with certainty, accomplished while its passengers are on board.

We hold the opinion that the attempt to disinfect a ship on which a case of Asiatic cholera has occurred, without the use of modern methods and modern appliances for this purpose, and under the direction of persons acquainted with their use, is not only liable to lead to uncertain results, but to such prolonged detention of the ship as is unjust to others.

Dr. A. P. Williamson, late superintendent of the Third Minnesota Hospital for Insane, has located in Minneapolis, where he will treat mental and nervous diseases exclusively.

The New York Medical Times.

A MONTHLY JOURNAL

OF

MEDICINE, SURGERY, AND COLLATERAL SCIENCES.

EDITORS:

EGBERT GUERNSEY, M.D. ALFRED K. HILLS, M.D.

Business Communications should be addressed, "Publishers, 528 Fifth Ave.," and Checks, etc., made payable to THE NEW YORK MEDICAL TIMES.

Published on the First of each month.

OFFICE: 528 FIFTH AVENUE, NEW YORK.

NEW YORK, DECEMBER, 1892.

Changes of standing advertisements and communications in regard to that department, should be addressed to BENJ. LILLARD, Advertising Manager, 72 William Street, N. Y.

FLORIDA AS A HEALTH RESORT.

THE early history of Florida was one of bargain and sale of conquest and strife of bloody battle between the Spanish and the Indians, and the Spanish and the French, till, weary of an unprofitable possession, in which was found neither gold or diamonds or the much-sought-after fountain of eternal youth, it was purchased from Spain by the United States in 1819 for five millions of dollars. A fort was built upon the Tortugas and the territory occupied by the United States; but for many years after but little was heard of it except through the frequent contests of our troops with the Seminoles. The educated officers brought back with them the report not of a land of barren sand, of impenetrable swamps and of death-dealing malaria, but the story of immense forests of pine and cedar and live oak, lakes and rivers stocked with fish, forests filled with game, and a soil upon which flourished sub-tropical fruits, especially of the citrous variety, in the greatest profusion and the most delicate flavor. Malaria exists without doubt along the banks of some of the rivers, in swamps and in hummocks, but there is really less malarial trouble in Florida than almost any other State in the Union, and the deaths from all sources are less than any other State except Idaho. The log cabin has given place to beautiful and luxurious cottages, and the frontier hotel, with badly cooked food and corn husk or board mattresses, to hotels unsurpassed in all the elements of comfort by any in the world. Every year more and more of the land is brought under culture, and the trend of travel for winter pleasure and health seekers is more and more away from the south of Europe to the Peninsular State. Even those who wish to remain longer than the winter months, directing their attention perhaps to the great industries of the State, find the temperature by no means excessive, while the cool winds sweeping across the peninsula from the great bodies of water on either side make the climate even in summer pleasant and healthy. Two great roads, one on the east side of the State and one running through the northern, central and western part of the peninsula to Tampa, on Tampa Bay, and throwing out feeders almost innumerable form a net-work of well-managed roads, which connect with the great arteries of travel to the North. The Plant system, which has done so much to open the wealth of the State, includes express trains to Tampa, and steamboat communication from thence to Cuba, Mexico and South America. When Tampa was made, in 1885, the railroad terminus of the Plant system, it was a small village not exceeding 700 population. In seven years the village has grown into a well-regulated city of over ten thousand population, with excellent stores and markets, pleasant homes and a hotel unsurpassed by any, not alone in this country, but the world. Rising in the midst of a park fronting on Hillsborough River, at the head of the bay, this magnificent Moorish palace, in its Oriental setting of sparkling fountains, and trees and flowers gathered in rich yet poetic profusion from every tropic and sub-tropic latitude of the great continents and the islands of the sea, more than realize the most enchanting picture ever given us of the palaces and gardens of Granada. This dream of beauty, crystallized in offices, parlors, bed-rooms and dining-rooms into a home of such comfort and luxury as only gold and unequalled taste could furnish, with its living fragrant surroundings of shrub and trees and flowers, is worth more than the three millions of dollars it cost to create, as an educator to the invalid, the pleasure seeker, the art lover, who will find in this luxurious home, this life-giving air and sunshine, not only rest and rapidly returning health, but a remembrance of beauty and harmony and pleasant companionship which will never fade from the memory.

Full as Florida is of pleasant places easily reached by its net work of railroads, there is nothing more healthy or more desirable for a winter residence than the sub-peninsula of Pinellas bounded on the south and east by Tampa Bay and Lake Butler, on the north by Anclote River, of which Tarpon Bayou is an arm. This strip of

rolling land of perhaps two hundred thousand acres almost like a park in its swelling hills and tall pines, with an average annual temperature of 72° and average winter temperature of from 58 to 65°, was only a few years ago selected by a company of physicians and scientists, who had visited the best health resorts of the world, as a most desirable home for invalids and for those wishing a winter home, but scientific and professional men are not generally good business men, and the project for the time being at least has been given up, but Tampa on the south and Tarpon Springs on the north, situated on the Anchote River and a bayou three miles from the gulf, only twenty-six miles apart, are the objective points of a region which at no distant day can hardly fail to be filled with winter homes. Ice of the finest quality is manufactured and sold as cheap as it can be obtained at the north. The drinking water at Tampa Bay Hotel is from a well six hundred feet deep and as pure as that of Waukeshaw or Poland Springs, and so free is this country from malaria that during the Seminole war the sick from the army were sent to the fort at Tampa to recruit. It is one of the wonders of modern travel that in thirty hours the traveller can be transported, with almost as little fatigue as if in his own house, from the frost and snow of a northern winter to the sunshine of a semitropical climate, from the snow and muddy streets of the north and furnace heated houses to a life out of doors and in cheerfully appointed homes. Less than a day's sail and you are in the harbor of Havana, and a few hours ride in almost any direction brings you to places of beauty which are a paradise to the health-seeker and the sportsman. In the future, climate in reference to health will be carefully studied by the physician as one of the most important factors in a wiser and better therapeutics.

THE CRANK'S PROGRESS.

PARANOIA—that manifestation of insanity which is most conspicuous in the numerous and troublesome class of persons known as "cranks"—is the subject of a paper by Dr. Henry S. Williams in the *North American Magazine* for June. The disease, which is especially denoted by the presence of systematized delusions of persecution, is usually the result of inherited mental instability, and its attributes may be outlined as follows: One may even point out in the child what might be termed the paranoiac temperament. Its characteristics are morbid sensitiveness and great egotism. Unfortunately the parents of such a child usually take pride in the egotism that leads to eccentric acts; while the extreme precocity of many of these subjects causes their egotism to be fostered by ill judged praise. Usually the child of paranoiac temperament is the genius of the family and the show-pupil at school. Pampered and praised, even though the entire household becomes subordinated to his sovereign will, he is not satisfied, believing that he does not receive his dues. With that idea the germs of paranoia are planted in his mind. And, of course, the brilliant child is the one whose mental training will be forced. The other children of the family may stay at home, but this one must be sent to college and fitted for one of the learned professions. Often he is an "honor" man at college, and he starts out into the world with every seeming prospect of an eminently prosperous career.

Occasionally the young person of paranoiac temperament breaks down under the unbalancing influence of overstudy while at school. But usually the critical stress comes after he has gone out into the world. He is usually not yet insane. He may never become so. If his business or professional ventures succeed, he may become distinguished, and contact with the world may gradually correct the morbid tendencies. But if adverse circumstances arise and refuse to be put down, especially if the individual's vanity is wounded by failure to rise to the heights pictured by ambition, morbid brooding may develop out of vanity, selfishness and suspicion the delusion of persecution.

At this stage the victim of paranoia often becomes dangerous. Brooding long and earnestly over the situation in which he is placed, he comes to believe that hosts of people are leagued against him, and his one thought is how to thwart his imagined foes. Murders are often committed by persons in this condition. Year after year, and decade after decade, the paranoic may go on his erratic way, nursing an ever-multiplying host of delusions, building castles of sand, and wildly pursuing *ignes fatui*. If he has artistic or literary tastes he may produce, spasmodically, brilliant works, but his efforts are seldom long sustained in one direction. Usually from time to time it suits his fancy to devote his energies to the cause of some reform league for revolutionizing society or the government. If his native temperament be amiable he will be simply a fanatic, perhaps a socialist; if vicious, he will probably become an anarchist. He is usually nothing if not progressive, and a new fad, especially if it be an occult one, is meat and drink to him. Revivalism, spiritualism, faith cure, Christian science, theosophy are his pastimes. In

short, everything that is vague, visionary, occult finds a following—often the originator—among the paranoic ranks. They will propagandize these ideas from the house tops, but their own personal delusions are usually kept secretly locked in their own bosoms. It is on account of their secretive natures that they are so dangerous to society and that it is so difficult to find a jury which will pronounce them insane.

To the parent, and to every one engaged in directing the minds of children, Dr. Williams gives, in conclusion, this counsel: whenever there comes under your care one of those eccentric, brilliant, precocious children whom you are prone to regard as a budding genius, learn to believe that you have probably to do with incipient paranoia instead, and govern yourself accordingly. By restraining the energies and checking the eccentricities of such a child you may do something toward molding an aberrant mind back toward normality; by stimulating the energies and fostering the germs of "genius" you may help to prepare a victim for an asylum or a prison. There is some hope that you may develop a sane man out of a child of paranoiac temperament; there is little fear that you will clip the wings of genius.

THE USE OF MALLEIN (FROM MALLEUS HUMIDUS) FOR DIAGNOSTICATING CASES OF GLANDERS IN HORSES.

THIS disease, probably as old as civilization, has not up to the present time been curable. It is produced by a specific micro-organism discovered by Löffler and Schutz, is contagious and has caused the death of no small number of men.

The difficulty with which this disease is diagnosticated, particularly in its early stage, on account of absence generally of all symptoms, will no doubt tend to create a widespread use for mallein, if it proves a reliable aid in the diagnosticating, and still more if it proves to be a cure for this dreaded disease.

Mallein was first prepared as follows by Kalning, who unfortunately succumbed to this disease while conducting his experiments: Five grammes of the pure culture of the malleus bacillus are mixed with 20 c. c. of sterilized distilled water, and the mixture heated for twenty minutes at 120° C. in a thermostat. Set aside for forty-eight hours, then repeat the heating as above. Keep at a temperature of 39° C. for forty-eight hours, filter through Pasteur filter. The product, a fluid of light yellow color, is once more heated to 120° C. for fifteen minutes.

Three afflicted horses, each receiving an injection of 1 c. c. of this fluid, showed respectively an elevation of 2 to 2.7° C. in from ten to twelve hours, while two healthy horses which received the same quantity of the fluid failed to show any rise in temperature.

Another simple process is that of Preusse, by extracting potato-cultures with a mixture equal parts glycerine and water at a temperature of 35° C., filtering and diluting to ten times its volume with a 2 per cent. carbolic acid. One to three cubic centimetres injected into horses with glanders in each case indicated a rise in temperature, while in healthy horses the temperature remained normal.

Preusse's results have been verified by Heyne, Schilling, Peters and Felisch, Dieckerhoff and Lothes, the last three proving that mallein fails to produce a rise in temperature in other diseases, particularly those which are apt to be mistaken for glanders.

A third method is that of Pearson, prepared by adding culture to aqueous meat peptone, with salt and glycerine added, placed in a thermostat for fourteen days at a temperature of 36.5° C., then the whole heated for several hours to 80° C. The filtered product subjected to steam heat for twenty minutes at a time for three successive days. Afflicted guinea pigs inoculated with the product showed the characteristic rise in temperature.

Foth, by the addition of alcohol, and Gutzeit, by alcohol and also corrosive sublimate, succeeded in separating a principle from the lymph, an aqueous solution of which, when injected into afflicted animals showed the characteristic rise of temperature.

Whether mallein will act as a curative agent remains yet to be seen, and which a series of extended experiments will probably prove.

THE CONTRAINDICATIONS TO QUININE.

THE first contraindication to the use of quinine, says the *Therapeutic Gazette*, is any condition in which we fail to find any just reason for its use, for quinine is *not* a drug which can be given freely at all times without harm. The other contraindications are numerous and important. Albertoni and others have proved that conditions of irritability of the cerebral cortex contraindicate its employment, and wide clinical experience shows that these experimenters were right in their conclusions and that epilepsy is often increased in the frequency of attack and in severity by quinine. Again, we find that the best therapeutic students are unanimous in asserting

that quinine when eliminated in large amounts is capable of causing irritation of the genito-urinary tract, and Stillé states that any inflammatory disease of these parts is made worse by quinine. Acute cystitis, urethritis, specific or otherwise, and, most important, acute nephritis, prevent the use of quinine in many cases. This is particularly important if, in association with the renal difficulty, there is also uræmia or a tendency to it. The studies of Roosa long ago showed that quinine was capable of causing deafness by congesting the middle ear, and it is common-stock knowledge to-day that total and permanent deafness may be brought on by full doses of quinine in persons who have already some form of middle-ear disease. The clinical picture of cerebral congestion produced by quinine in full doses is sufficiently well marked to indicate to the careful physician that quinine (in such doses) is contraindicated by cerebritis, meningitis, or congestion of the brain, and experiments on the lower animals show that the drug exercises just such an effect as is seen in man, the capillaries of the meninges becoming engorged and congested under the effect of full doses of the alkaloid of cinchona. Gastritis is a very distinct contraindication to quinine. The writer believes that many cases of gastric irritability are largely due to the ingestion of quinine, particularly in the case of children. The malaise dependent upon gastro-intestinal disorder is often temporarily removed by the stimulus of quinine in moderate doses, only to return later in a more aggravated form on the withdrawal of the quinine or during its prolonged use. Finally, there are a number of patients who can not take quinine because of idiosyncracy. In some of these hematuria and epistaxis are developed. In others, disagreeable eruptions assert themselves. Careful inquiry should always be made of patients before quinine is given to determine the possibility of such tendencies. Curiously enough, some persons who can not take the sulphate of quinine can take the hydrochlorate or hydrobromate very readily.

NEW REMEDIES.

SALOPHEN.—The active constituents of this remedy are salicylic acid and acetyl paramid ophenol, which are decomposed in the intestine by the alkaline secretions. Dr. Camier, Elberfield, reports in the *Theraupeutiche Monatshefte* marked relief from the drug in habitual headache given in fifteen grain doses every two hours, also as a promptly acting remedy in rheumatism and in a large variety of neurosis.

Bœttiger has used *Trional* in seventy-five cases and finds it has a much more prompt action than chloralamide in all cases where the latter drug is indicated. In insomnia its genitory action is best shown in sleeplessness without pain, the drug having no special action on the mental condition.

Salafield has found sosophon of special benefit in parasylic affections of the skin, both vegetable and animal, a 1 to 2 per cent. watery solution was used.

Thiol is preferable to icthyol in the treatment of disease of women from the fact that it is without odor, causes no smarting, has anesthetic qualities and the stains are readily removed by soap. Icthyol has a disagreeable odor, increasing with the length of time it is applied, causes a pricking sensation, is without anesthetic effects and the stain difficult of removal.

ALCOHOLISM.

DR. VILLARD, of Paris, has recently given to the world, in a work entitled *"Lecons sur d'acoolisme,"* the result of extended observation, pathological and general, upon the effects of alcohol, long continued, on the system and the cure of dypsomania. The effect of alcohol on the lungs is shown by the hardness of them, with functional troubles only, or the sclerotic lesion of the lungs is complicated with an enlargement of the bronchial tubes and purulent secretion, or finally, the heart being no longer able to support the struggle, the sick person dies of asystole. It can not be said that the sclerotic or hardening effects of alcohol on the lungs is favorable to the production of tuberculosis in these organs, but it is none the less true that alcoholism may lead to tuberculosis. In general, the alcoholic poison has a uniform action whatever be the organ attacked. Vascular troubles are soon followed, on the one hand, by degeneracy of the arteries; on the other hand, by cellular degeneracy, and in many cases by the appearance of fatty germs. This condition of degeneracy produced in the cells by alcohol, the cellular hypoactivity explains how the organism becomes incapable of defending itself against pathogenous germs or their poisonous products. It enables us to understand the gravity of all disease which attacks alcoholic persons. Dr. Gustav Beldan, in discussing this subject, more especially in reference to treatment, asserts that all authors agree that the treatment of chronic alcoholism by nitrate of strychnine gives results more or less favorable, and that in certain respects strychnine is a physi-

ological antagonist to alcohol. The results are better when the strychnine is administered in large doses and for a considerable length of time. Alcoholic persons stand without inconvenience relatively enormous doses of strychnine. There is no doubt that strychnine is one of the prominent and most efficient ingredients in the Keeley and other cures for dipsomania. In the hands of the careful observer it may be pushed to its perceptible physiological results with no special danger.

THE BACTERIAN ORIGIN OF BILIOUS FEVER.

DR. DOMINGOS FREIRE, under an appointment from the government of the State of St. Paul, Brazil, to study the genesis of the epidemic which was very fatal there last summer, collected with all possible care, for bacteriological researches, blood, bile, urine, as well as the viscera, the liver, kidneys, etc. These investigations were directed to the bilious and yellow fever then prevailing as epidemics, and the conclusions reached were, that the bilious fever of warm countries and the yellow fever, although very like each other, are entirely distinct maladies, both by bacteriological characters and pathological signs. The animated infectious agent of bilious fever of warm countries is a bacillus measuring on an average nine microns in length to three in breadth. Each bacillus is motionless, but accompanied by numerous mobile spores. The productive agent of yellow fever is a micrococcus, measuring not more than a micron, round, and very refractory. A more careful investigation of the bacillus and micrococcus with the pathological changes produced will undoubtedly lead to improved results in diagnosis and treatment.

DR. GORDON CRITICISES THE DRUGGISTS.

DR. BERNARD GORDON read a paper before the Academy of Medicine recently on "The Present Condition of Our Pharmacies, with Suggestions for Their Improvement."

Dr. Gordon's paper was not at all flattering to the compounders of medicines in this city. The drug stores, he said, as a general rule were left to care for themselves. The physicians are too busy at their own practice to pay much attention to them, and the public in its ignorance of medical matters confidently relies upon the druggists to give them pure drugs and charge reasonable prices. Dr. Gordon believed that certain laws ought to be passed by the Legislature regulating the drug business in this State.

Some of the changes advocated were: To check the excessive competition in the retail drug business by legalizing one only for every 7,000 to 10,000 inhabitants; to enforce the law of inspectors and analysts; to require the copying of each prescription and returning the original to the owner; to regulate the retail prices of medicines and absolutely prohibit the sale of poisons unless sanctioned by a physician's prescription.

TREATMENT OF ORCHITIS.

A CORRESPONDENT writes us for information respecting the treatment of acute orchitis, caused by horseback riding. Assuming that the case is not complicated with gonorrhœa, we should say that tinct. arnica rad., five drops in water three times a day, with the application of dry heat, would probably cure the case. Of course, rest should be enjoined, or at least the testicle should be supported by a well-fitting suspensory.

If the patient is not promptly cured, pulsatilla in the same dose as above may be required.

GLYCERINE, says Dr. Ferrora, administered in doses from a half ounce to an ounce is a powerful cholagogue, and an excellent remedy for hepatic colic. Glycerine administered by the stomach is absorbed in its natural state by the lymphatics, especially by the vessels which lead from the stomach to the hilum of the liver and to the gall bladder, and is ever found in the supra-hepatic veins. Given in smaller doses, from a teaspoon to a tablespoon, in a little alkaline water, it prevents new attacks. The action of sweet oil, which has been found beneficial in biliary calculi and hepatic colic, is undoubtedly very similar to that of glycerine.

DR. CONSTANTINE HERRING, in writing on cholera, said: "Put half a teaspoonful of flowers of sulphur into each of your stockings, eat no fresh bread nor sour food.

"This is not only a preventive in cholera but also in many other epidemic diseases. Not one of the many thousands who have followed this advice have been attacked by cholera."

The London *Lancet* quotes the opinion of the president of the Institute of Civil Engineers that the sulphurous vapor produced by the combustion of coal in London, kills the disease germs in the atmosphere, and the old woman's remedy for rheumatism in the lower limbs, of sulphur in the stockings or a sulphur garter may not be unworthy the attention of the learned physician.

THE World's Columbian Exposition has organized a Bureau of Hygiene and Sanitation to prepare a collective exhibit illustrative of the present condition of sanitary science.

The aim of the Bureau will be to show as adequately as possible the position in which the theory and practice of Hygiene stands at the present day, and it is hoped that the Universities, the Colleges, the Boards of Health, State and Municipal, the Societies having Hygiene and Sanitation as their keynotes, the scientists, the physicians, the manufacturers and the public generally will cordially co-operate in the endeavor to make the exhibition worthy of the science and of our country.

Such varied sources will naturally produce varied results. Varied results shown in diverse ways will serve to heighten the general interest, which should result in the improvement of the "public health."

THAT many of the more virulent varieties of bacteria will live in ice but can not stand steam at a temperature of 212 has been fully demonstrated. In Washington, recently, the body of a child that had died of diphtheria was packed in ice for a couple of days and the ice afterwards thrown into the street. Three children who were seen eating the ice died in a few days of diphtheria; of the thirty-two children whose diphtheritic attacks could be traced directly to the ice which had been thrown on the ground, fifteen died. That the germs of typhoid fever have been carried to localities where the disease has been strictly traced to the ice has been shown in many cases. It is rather startling, however, when we find that in London an outbreak of enteric fever has been traced to the distribution of infected ice cream by Italian street venders. The introduction of artificial ice made from distilled water has at least the advantage of being absolutely free from bacterial poison.

BELLEVUE HOSPITAL MEDICAL COLLEGE in consequence of the loss of some of its best teachers by resignation and by death, and also on account of the injustice shown to a student last year, we are told has a much smaller class this year than usual. We are glad to learn that the Commissioners of Charities and Correction are no longer to sign the diplomas of this institution, which gave it a *quasi* endorsement unjustifiable. Autocrats deserve no place in the medical profession, they should be identified and excommunicated wherever found, whether at the head of medical colleges or in society work.

THE new Wm. J. Syms Operating Theatre of the Roosevelt Hospital, the best equipped structure of its kind in the world, was recently opened in this city. To Dr. Charles McBurney is due the credit of its existence, as it was through his influence that Mr. Syms devoted $350,000 to this object.

The building and equipment has cost $200,000, and the endowment for its maintenance will be $150,000. No description can do justice to this magnificent structure, and it must be seen to be appreciated.

IN quoting from the American *Lancet* "Away with the Code," the *Medical Record* says "It is felt that the *regular* profession makes what may be called a political mistake in antagonizing dogmatic medicine and identifying it with quackery; the profession should antagonize dishonesty (in *regular* or *dogmatic* medicine) and no code can be too strong in formulating high standards of professional conduct, as it regards this point." The New England *Medical Monthly* says, "Let us do away with the code or enforce it; probably the former is the better way."

THERE seems to be no end to the process of learning and unlearning, of receiving as invaluable and rejecting as worthless. Dr. McClintoch publishes in the *Medical News* of October 1st and 8th, his experiments upon the germicidal character of corrosive sublimate, and concludes that the high rank given to it as a germicide is without warrant and based upon faulty experiments, and demonstrates that vinegar containing from 6 to 7 per cent. of acetic acid has as much power in preventing the growth of microorganisms as 1 to 1,000 solution of corrosive sublimate.

THE *Post-Graduate* hits the nail square on the head with a telling blow when commenting on the editorials of a Philadelphia medical journal urging a revision of our code of ethics, says:

"Dear neighbor, codes need not trouble you. What Pennsylvania needs is a good law creating a board of medical examiners. Improve the quality of physicians. Make them all pass an honest State examination, homœopaths and regulars alike, and codes will be unnecessary. A little more knowledge, and a little less, not of ethics, but of talk about ethics, is what the profession of this country needs."

BIBLIOGRAPHICAL.

THE "CENTURY MAGAZINE" IN 1893.

It would be hard for a person who cares for good reading to make a better investment than a year's subscription to the *Century Magazine*. No region is too remote, no expense too great, if it will only produce what the *Century's* readers want. This is the policy that has made it, as the *Pall Mall Budget*, of London, says, "By far the best of the magazines, English or American."

The November number begins a new volume and contains the first chapters of a powerful novel of New York society, called "Sweet Bells Out of Tune," written by Mrs. Burton Harrison, the author of "The Anglomaniacs." In this story the fashionable wedding, the occupants of the boxes in the Metropolitan Opera House, the "smart set" in the country house are faithfully reflected, and the illustrations by Charles Dana Gibson, *Life's* well-known cartoonist, are as brilliant as the novel.

In this November number begins also a great series of papers on "The Bible and Science," opening with "Does the Bible contain Scientific Errors?" by Prof. Shields, of Princeton, who takes decided ground that the Bible does not contain scientific errors of any moment, and who most interestingly states the case from his point of view. Other articles in this series will include one in the December (Christmas) number, "The Effect of Scientific Study upon Religious Beliefs."

An important series of letters that passed between General Sherman and his brother, Senator John Sherman, is also printed in November, which number contains also contributions from the most distinguished writers, including an article by James Russell Lowell, which was not quite completed at the time of his death. The suggestion which Bishop Potter makes in the November *Century* as to what could be done with the World's Fair if it were opened on Sunday, is one which seems the most practical solution of the problem yet offered.

The December *Century* is to be a great Christmas number—full of Christmas stories, Christmas poems and Christmas pictures—and in it will begin the first chapters of a striking novel of life in Colorado, "Benefits Forgot," by Wolcott Balestier, who wrote "The Naulahka" with Rudyard Kipling.

Papers on good roads, the new educational methods, and city government are soon to come.

Four dollars will bring you this splendid magazine for one year, and certainly no cultivated home can afford to be without it. Subscribers can remit directly to the publishers, The *Century* Co., 33 East 17th St., New York. They should begin with November, and so get first chapters of all the serials, including "Sweet Bells Out of Tune."

THE MEDICAL NEWS VISITING LIST for 1893. Philadelphia: Lea Brothers & Co., 1892.

The profession are so familiar with the excellence of this visiting list that it is only necessary to call their attention to its publication.

Blakiston & Son's MEDICAL VISITING LIST enters upon the forty-second year of its publication with the usual excellence of arrangement and matter.

The late issue of the "Student's Quiz Series" of Lea Brothers & Co., is on *Diseases of Children*, by C. Alexander Rhodes, M. D., of the New York Post-Graduate School. The work is prepared with the same care which has characterized the other volume of the series.

DISEASES OF THE CHEST, THROAT, AND NASAL CAVITIES, including Physical Diagnosis and Diseases of the Lungs, Heart and Aorta, Laryngology and Diseases of the Pharynx, Larynx, Nose, Thyroid Gland and Œsophagus. By E. Fletcher Ingals, A. M., M. D., Professor of Laryngology and Practice of Medicine, Rush Medical College; Professor of Diseases of the Throat and Chest, Northwestern University Women's Medical School; Professor of Laryngology and Rhinology, Chicago Polyclinic, etc., etc. Second edition, revised and enlarged. 240 Illustrations. Octavo, 700 pages, extra muslin, price, $5.00. William Wood & Co., New York.

In the second edition of a work which has gained a wide reputation the author has not only carefully revised the previous edition bringing it fully up to the present knowledge in a speciality which within the last few years has made immense advance, but has naturally enriched every subject treated by carefully consulting the extensive literature of the topics treated and subjecting the treatment to the crucible of his own large experience. The reader will find the work in etiology, pathology, symptomatology, prognosis and treatment a mine of well arranged facts and well digested thought.

AN AMERICAN TEXT-BOOK OF SURGERY FOR PRACTITIONERS AND STUDENTS. Edited by Wm. W. Keen, M. D., LL. D., and J. Wm. White, M. D., Ph. D. Profusely illustrated. Philadelphia: W. B. Saunders, 1892, pp. 1209, large octavo. Sold by subscription only at $7 cloth, $8 in sheep.

The title of this work sufficiently indicates its character. The text has been prepared by American authors who are teachers of surgery in leading medical schools and hospitals, "especial prominence being given to surgical bacteriology, and to the most recent methods of treatment, particularly in relation to asepsis and antisepsis, and to the newer methods in those departments in which of late such notable progress has been made, as in cerebral, spinal, abdominal and pelvic surgery, etc." The book really expresses the consensus of opinion upon all the subjects treated, of the large number of able authors who have joined in its preparation, thus forming a text-book *par excellence*. The physical parts of the work is unexceptional.

A TEXT-BOOK OF THE PRINCIPLES AND PRACTICE OF MEDICINE, for the Use of Medical Students and Practitioners. By Henry M. Lyman, A. M., M. D., Professor of the Principles and Practice of Medicine in Rush Medical College, Chicago. With One Hundred and Seventy Illustrations. Philadelphia: Lea Brothers & Co., 1892; pp. 923, 8vo.

This book adds another to the excellent works of this class so that the student has a long list to select from. A new departure is ventured in the arrangement of topics, and the text is presented with all possible brevity. The work is brought down to date, is fully abreast of the times and is in good English.

A PRACTICAL TREATISE ON DISEASES OF THE SKIN. By John V. Shoemaker, A. M., M. D., Professor of Skin and Venereal Diseases in the Medico-Chirurgical College and Hospital of Philadelphia, etc., etc. Second Edition, Revised and Enlarged, with Chromogravure Plates and other Illustrations. New York: D. Appleton & Co., 1892; pp. 878, 8vo.

A very complete and excellent work, most intelligently written, and illustrated sufficiently for practical purposes, without being bulky, hence will be found of great service to the active general practitioner, upon whose shelves it will undoubtedly find its way.

A MANUAL OF MEDICAL JURISPRUDENCE. By Alfred Swaine Taylor, M. D., F. R. S. Revised and Edited by Thomas Stevenson, M. D., London, Fellow of the Royal College of Physicians, etc. Eleventh American, Edited with Citations and Additions from the Twelfth English Edition. By Clark Bell, Esq., President of the American International Medico-Legal Congress of 1893, Ex-President of the Medico-Legal Society of New York, etc., etc. Philadelphia: Lea Brothers & Co., 1892.

This work is so well known, that a notice of the issue of another edition is all that is required of so standard a book. The present is an entire revision of all prior editions, much new matter has been added, many portions amended and some parts re-written. The American editor has cited nealy 700 cases and authorities which will be found of great service to medico-legal jurists.

TEXT-BOOK OF NERVOUS DISEASES, being a Compendium for the Use of Students and Practitioners of Medicine. By Charles L. Dana, A. M., M. D., Professor of Nervous and Mental Diseases in the New York Post-Graduate and in the Dartmouth College; Neurologist to the Montefiore Home, etc. With 210 Illustrations. New York: Wm. Wood & Co., 1892.

A work by Prof. Dana on nervous diseases could hardly fail of attracting the special attention of the medical world, and the work itself gives unmistakable proof of wide and intelligent reading, laborious investigation and original thought. The anatomical chapters give in a condensed form a very excellent idea of modern neuro-anatomy. In the classification and description of the pathology of nervous diseases, the knowledge of general pathology is applied as modified by bacteriology. In no department of our profession within the past two decades has so much that is new and valuable been brought to light as in the structure of the nervous system and the troubles growing out of its derangement. While Dr. Dana's work does not take the place of the exhaustive treatises on special subjects, it does present, in clear language sufficiently minute to be intelligible, the leading facts in reference to the structure and pathology of diseased conditions of the nervous system and the treatment which he deems best adapted to special or general conditions.

TUBERCULOSIS OF BONES AND JOINTS. By N. Senn, M. D., Ph. D., Professor of Practice of Surgery in Rush Medical College; Professor of Surgery in the Chicago Polyclinic; Attending Surgeon Presbyterian Hospital; Surgeon-in-Chief St. Joseph's Hospital; President of the American Surgical Association; President of the Association of Military Surgeons of the National Guard of the United States; Permanent Member of the German Congress of Surgeons, etc. Illustrated with 107 Engravings (seven of them colored). In one handsome Royal Octavo Volume, 520 pages. Extra Cloth, $4.00 net; Sheep, $5.00 net; Half-Russia, $5.00 net. Philadelphia: The F. A. Davis Co., Publishers, 1231 Filbert street.

The object of the author has been to collect from recent literature the modern ideas of tubercular diseases of bones and joints and present them to the reader in a condensed form, mingled in appropriate places with the result of his own experience. Old authorities are occasionally quoted for the purpose of showing the contrast between the old and recent views regarding the etiology and nature of this form of bone disease. As the successful treatment of these affections depend largely upon an early and correct diagnosis and the timely local and general treatment, the large experience of the distinguished author will prove of immense value.

DISEASES OF THE LUNGS, HEART AND KIDNEYS. By N. S. Davis, Jr., A. M., M. D., Professor of Principles and Practice of Medicine, Chicago Medical College. *No. 14 in the Physicians' and Students' Ready-Reference Series.* In one neat 12mo volume of 359 pages, Extra Cloth, $1.25 net. Philadelphia: The F. A. Davis Co., 1231 Filbert Street.

The author goes direct to the heart of his subject, and in the channels of his diagnosis points out the class of remedial agents which he thinks best adapted to each condition. Thus in asthma, "an analysis of the mode of action of the drugs that are most successful in asthma shows that in one of these ways they relieve the spasms. The first group includes those that affect the sources of irritation; the second, those that benumb the nerve center or reflector of irritation; and the third, those that act upon the focus of irritation." With the cause of the trouble clearly stated, the author conveys a tolerably clear idea of how and when to use the remedial agents it has found most successful. A more minute study of the physiological action of drugs, however, would enable the author to make many important changes. In the selection and use of drugs the author is not always up to the advanced student of even the Old School.

THE ANATOMY OF THE PERITONÆUM. By Franklin Dexter, M. D., Assistant Demonstrator of Anatomy, College of Physicians and Surgeons, New York. With Thirty-Eight Illustrations. New York: D. Appleton & Co., 1892, pp. 86, 12mo.

The author of this little *brochure* in his great experience as a teacher, realizing the difficulties under which the student labors in attempting to master the anatomy of the peritonæum, has presented a scheme to take the student along step by step in an elementary way, by means of plates with explanatory text, which we believe will be appreciated as a practical method, especially because it can be readily understood.

MEDICAL MICROSCOPY. A Guide to the Use of the Microscope in Medical Practice. By Frank I. Withered. With Illustrations. Philadelphia: P. Blakiston, Son & Co., 1892.

In this work an effort has been made to lay before practitioners and students the most simple methods of preparing microscopic sections and of the examination of urinary deposits, sputa, blood, etc., at the same time more elaborate methods have been detailed and chapters added on the examination of food and bacteriological methods. A very interesting chapter on tumors has been inserted for purposes of diagnosis.

TRANSACTIONS OF THE THIRTEENTH ANNUAL MEETING OF THE AMERICAN LARYNGOLOGICAL ASSOCIATION, held in the City of Washington, D. C., September 22-24, 1891. New York: D. Appleton & Co., 1892; pp. 165, octavo.

This volume covers a vast amount of valuable clinical experience in the department of laryngology, and will be found of great interest to those specially interested in the subject.

ELECTRICITY IN THE MEDICAL PROFESSION.

The *Electrical Review* presents weekly a department devoted to the various applications of electricity in the profession, conducted by Dr. J. Mount Bleyer.

Every progressive physician in the United States will be interested in this important work, and should include the *Electrical Review* in his list of journals. By mentioning this journal a sample copy will be sent on application.

ANÆSTHETICS, THEIR USES AND ADMINISTRATION. By Dudley Wilmot Buxton, M.D., B. S., Member of the Royal College of Physicians, etc. Second Edition. P. Blakiston, Son & Co., Philadelphia, 1892; pp. 222, 12mo, price, $1.50.

This little volume is a practical manual upon the subject of which it treats, and will enable the student to become a scientific as well as practical master of this art.

THE WIFE AND MOTHER. By Albert Westland, M. D., Philadelphia: P. Blakiston, Son & Co., 1892.

The plan of the author has been to give just that information which the young inexperienced wife and mother needs. And all that an intelligent woman might be expected to appreciate and utilize. It is just the book which the physician would like to place in the hands of the young wife and mother.

A NEW TEXT-BOOK ON ANATOMY. P. Blakiston & Son announce for early publication a new and systematic textbook on anatomy, written by ten of the foremost anatomists and surgeons in the English-speaking world, and containing about 600 illustrations. The price will be from six to eight dollars.

THE STUDENT'S QUIZ SERIES. Histology, pathology and bacteriology. By Bennett S. Beach, M. D. All of the works of this Quiz Series are excellent compends of the subjects treated. Lea Brothers, Publishers.

The medical book publishers, Wm. Wood & Co., are issuing a series of pictures of a high order of beauty and finish at the low price of one and two dollars, specially adapted to the library, the reception room and the office of the physician. The last of the series, those familiar with Bilroth's clinic in the great Vienna hospitals will recognize as true to life in all its details. A sheet containing miniature reproduction in heliotype of the sixteen pictures published will be sent on receipt of four cents in stamps.

Leonard's *Illustrated Medical Journal* has contained a large number of prescriptions during the past five years from a host of physicians throughout the world. One thousand of these are included in the volume, properly indexed, with a blank page on each leaf for new prescriptions. The work would have been much more easy for reference if the prescriptions were properly classified in the body of the work, instead of being thrown together promiscuously, rendering a constant reference to the index necessary.

DR. FAULKNER'S VISITING LIST with an excellent repertory published by Boericke & Tafel, is so well known and popular, that it is only necessary to call attention to the fact that it continues to make its appearance each year, and is already out.

A very beautiful illustrated souvenir of Asheville, or the Sky-Land, has been prepared by Mrs. Harnet Adams Sawyer, of St. Louis, Mo., in which the charms of this health-giving region are vividly portrayed by word and pencil. The souvenir will be sent by mail postpaid for eighty cents.

The two last issues of the Physician's Library Series are monographs on Acne and Alopecia, by T. Duncan Bulkley, M. D., Prof. of Diseases of the Skin, New York Post-Graduate School, and physician to the New York Skin and Cancer Hospital; Fissures in the Anus and Fistula in Ano, by Dr. Lewis H. Adler, Jr., of the Philadelphia Polyclinic.

ORIGINAL COMMUNICATIONS IN NOVEMBER "THERAPEUTIC GAZETTE."

Dr. Werner.—"Nephrectomy for Enormous Sarcoma of the Kidney; Recovery." Dr. Longstreet Taylor.—"Shurly-Gibbes Method of Treating Phthisis." Dr. Colgan.—"Operation for Stiff Knee Following Tubercular Disease." Dr. Benedict.—"The Value of Metric System in Dosage." Dr. Salinger.—"The Use of Cold Water—Rectal Injections." Dr. Montgomery.—"The Diagnosis and Operative Treatment of Uterine Fibroids." Dr. de Schweinitz.—"The Use of the Ophthalmometer of Javal in the Correction of Cases of Astigmatism."

Messrs. Gross & Delbridge announce *The Medical Century*, a monthly, to be edited by Charles E. Fisher, M. D. The prospectus says, "it will be an independent, progressive, high-minded and strictly professional periodical," and as such we greet it with pleasure and offer our right hand of fellowship.

The successive quarterly volumes of the International Clinic, published by J. B. Lippincott Co., fully carry out the promise of the initial volume, furnishing to the profession quarterly a well-bound and handsomely illustrated book of between three and four hundred pages, filled with short essays and clinical lectures by some of the ablest writers and teachers in the medical world. The subjects discussed include the wide range of medicine, surgery, gynæcology, pedriatics, neurology, dermatology, laryngology, ophthalmology and otology. More than usual care is given to the preparation of the essays and the selection of clinical cases. The articles are short, full of condensed thought, with the strong points clearly brought out, and in style are excellent specimens of the best class of medical literature.

The popular little pocket "Manual of Poisons," by Dr. Tanner, has been issued in the seventh edition by Dr. Pease, and is published by Blakiston & Son. Price, 75 cents.

CORRESPONDENCE.

DID YOU MEAN IT, DOCTOR?

D. A. GORTON, M. D., Brooklyn, N. Y.

Dear Sir,—A Report of the semi-annual meeting of the New York State Homœopathic Medical Society, published under your initials in the November number of the TIMES, contains the following paragraph relating to the president's address on that occasion:

"The arguments brought forward by Dr. Fiske in favor of restricting marriage were not new. They have been presented over and over, yet the attention of the public can not be called too often to the fact that the taint of disease of certain character may crop out in succeeding generations, and that the only sure preventive is purity of life and living. At present it would be impossible to draw the line by legislation in the great social problem so as to include on the one side in the privilege of matrimony all free from a taint which would beget disease in the offspring, and exclude all who by errors of life or other causes have planted deep in their organizations the seeds of epilepsy, syphilis or drunkenness which might lead to insanity in the individual or the offspring. * * * *It is not unlikely that, to meet the exigency, we shall have to revive the custom of the ancients—that of exposing at birth the diseased and infirm.*"

There is no need, just now, that I should characterize the astounding suggestion embodied in the above italicized sentence as it deserves to be characterized, *supposing it to have been made in earnest.* Certain I am that, if it *was*

so made, no parallel utterance can be cited from any modern source whatever. The only thing in all literature that it reminds me of, is Dean Swift's "Modest Proposal" with regard to the best way of utilizing Irish babies during a time of famine, and that, you know, is merely a masterpiece of savage irony.

Were the words I am commenting on intended by you to be taken in a similar sense?

It is almost impossible to believe that the same writer who, on another page of the same number of the TIMES, invokes "our most faithful patient care, and our warmest tenderest sympathy," on behalf of neurasthenic sufferers, can look forward with approval to a cold-blooded and perpetual "slaughter of the innocents," in his own Christain country, and by a method far more barbarous than Herod's.

Yours very truly, GEORGE L. FREEMAN.

Glen Head, L. I., November 21, 1892.

REPLY.—I am not surprised that the suggestion to which our correspondent takes exception, should *seem* to him shocking and inhumane. But is it really so? If thine eye is an offense to thee, pluck it out. If a member is broken or diseased beyond cure, cut it off. If an organ of the body becomes infected with maglignant disease, exorcise it. These things *seem* cruel, but they are so only in the narrow seeming sense. They are proceedures dictated by the purest humanity.

I did not intend to commit myself wholly in favor of the suggestion which has so deeply stirred the sensibilities of my tender-hearted correspondent. But I could do so without seriously shocking my sense of the humanities—and I can not believe that any sense of humanity would suffer in comparison with that of my correspondent. If there is a more human way to deal with the problem let us have it, of course, if it be a practicable one. I would go further in the line of my suggestion and chloroform, by authority, all dements, idiots, confirmed epileptics, hoplessly insane and unreformable criminals, which swell the wards of our asylums, hospitals and penitentiaries. And this I would recommend for the sake of humanity, as an act of kindness to the victims of disease and mental infirmity. Let us rise above sentiments of the sickly sort and cultivate those of a normal, healthy character. D. A. G.

THE LATE PROFESSOR JAMES ROSS, M. D.

To the Editors of the NEW YORK MEDICAL TIMES:

I notice in the October number of your journal a letter traversing some of the statements made in an obituary notice of the late Dr. Ross, of Manchester, that appeared in the *M. H. Review* a few months ago, of which, I think, as the senior editor of the *Review*, I ought to take some notice.

Your correspondent asks: "Does not Dr. Ross' acknowledgment that homœopathy is *theoretically* true necessarily imply that he must have considered it capable of being carried out in practice, even granting that he never tested the matter experimentally for himself? But is the *Review* quite certain he did not so test it? How does it know that Dr. Ross was not more or less of a 'crypto-homœopath'?" The simple answer to this is that the writer of the notice called in question had a cordial personal acquaintance with Dr. Ross during many years; that what he wrote concerning him was derived from information obtained through conversation and from correspondence with him. It is not improbable that he did consider homœopathy capable of being carried out in practice; but, having a much greater interest in pathological research than in therapeutic inquiries, and being sufficiently satisfied with the therapeutics to which he had been accustomed, he did not feel the amount of interest in the matter necessary to induce him to put homœopathic therapeutics to the clinical test.

Your correspondent becomes hypothetical, and says: "Might he not in his daily practice have availed himself, when occasion appeared to arise, of the local action of medicines, their double action and the opposite effects of large and small doses, without feeling called upon in consequence to assume a distinctive appellation, and forfeit not only all hopes of obtaining the most coveted tokens of professional success, but also the opportunity of using his peculiar talents for the greatest good of others?" No, sir, Dr. Ross was not a "crypto-homœopath" or crypto anything else. He was a true Briton. He ever called a spade a spade, and had he investigated homœopathy, and so ascertained that homœopathically-chosen remedies were more useful agents than the antipathic measures he commonly resorted to, he would have scorned any endeavor to evade the wrath of the—so far as homœopathy is concerned—ignorant and malignant majority of the profession by any subterfuge, such as that suggested by your correspondent. No one, so far as I know, because he believes in homœopathy and practices homœopathically, as far as his knowledge and sources of learning enable to do, does feel "called upon to assume a distinctive appellation." If such an one does not ignore his responsibility for possessing a knowledge of homœopathy, but endeavors to fulfill his obligations to his profession by putting that knowledge within the reach of others, he will very likely have a distinctive appellation accorded to him—but that is not "assuming" one. Or again, if a physician, believing, through experimental inquiry, that homœopathy is true, and practicing in accordance with his belief, is asked, "Are not you a homœopath?" and, knowing well what his interviewer means, does not reply, "Yes, I am," he is simply a coward! He does not assume the distinctive appellation; he accepts it as expressing what the therapeutic views he holds are universally understood to imply.

To say that medical men practicing homœopathically "assume a distinctive appellation" is a device of the enemy of homœopathy, invented by Mr. Oliver Pemberton, of Birmingham. I am yours truly,

ALFRED C. POPE.

Grantham, Lincolnshire, October 29, 1892.

REJOINDER BY G. L. F.

A "crypto-homœopath" is one who practices homœopathy *secretly*. Dr. Ross, it appears, was not a crypto-homœopath, because—while acknowledging the truth of all that constitutes homœopathy, and probably considering the theory capable of being carried out in practice—he did not feel a "sufficient amount of interest in the matter" (!) to induce him to put it to the clinical test, and therefore could not be called a homœopath at all. Otherwise, Dr. Pope assures us, he would have permitted a distinctive appellation to be accorded him, and have manfully confronted all the consequences. That is, he would have followed the example of the late Dr. Henderson, of Edinburgh, who, many years ago, notwithstanding he also was a professor of pathology, did not disdain to make a practical application of his theoretical views, and became an avowed adherent of the new medical creed. Professor Henderson held his lucrative appointment for life, and therefore could safely defy "the wrath of the ignorant and malignant majority of the profession." Professor Ross, I fancy, was less fortunately situated. But let that pass. Each, I make no doubt, was "a true Briton," after his own pattern. My present purpose is simply to enter a protest against Dr. Pope's implied assertion that if his lamented friend *had* got into the way of "giving in disease small doses of medicines which in health produce effects similar to those marking the disease for which they are prescribed," and yet had repudiated the designation "homœopath," he would have been a coward. "Homœo-

path" is a name invented by the founder of a sect to distinguish his disciples, and Dr. Ross, as a votary of science, would have been perfectly justified, under the circumstances mentioned, in rejecting it if he chose.

ALCOHOL VS. THEIN.

We have seen, says an article on "Scientific Teetotalism," in the *Australasian Med. Gazette*, February, 1892, that the acids in fermented beverages are dictated by Nature's laws to correct the errors of eating a too concentrated diet, and secondly, that the alcohol in them is pernicious owing to its injury to the organs of the body. We must now examine as to how teetotalism is carried out. It is a total abstinence from alcoholic stimulants. But are these the only stimulants consumed nowadays? By no means so, for in no period of the world's history has the consumption of stimulants been so prevalent as at the present moment. But it may be said, how can this be when teetotalers who now muster by the thousand never touch stimulants? Don't they? Why they consume as much, or even more stimulants than the non-abstainers, for instead of taking them in the form of alcohol they take them as tea or coffee, for thein or caffein is as strong a stimulant as alcohol. They have simply substituted one form of stimulant for another. Tea and coffee rapidly spread over Europe when they were first introduced in the seventeenth century, because they acted as substitutes for fermented beverages, in that the tannic acid in them delays the digestion of nitrogenous substances. Thein is a pure stimulant to the nervous system, only it acts in a more subtle way. With alcohol you see most of the effects at once, but with thein it is different, for it acts like a most insidious poison. There is a certain balance in the power of the nervous system, for if it is over-stimulated it afterwards suffers from exhaustion which is manifested by nervous irritability, atonic dyspepsia, neuralgia, decayed teeth, constipation, nervous headaches, inability to suckle children, increase of lunacy and frightful crimes, from want of control over the nervous system. These are the evil effects of thein drinking. Another effect it has, when indulged in by children, is that it induces a craving for stimulants when they reach adulthood. Having given some of the evil effects of thein, it is only right that I should give some of its good effects. Thein has developed the brain power of our race, as is seen in the wonderful advance of inventive power. It has raised the animal man into the brain man. The crave for education is a consequence of its stimulating power developing the brain, but the question is whether this sudden forcing ahead of man's nervous system is for his permanent advantage. Is the Australian, who heads the list of nations that drink tea—which Nature has compelled him to do in consequence of the large quantity of meat he eats—gaining by this hot-house forcing of his nervous system in a hot climate? I say certainly not, for of all Australian vices I consider that the one which is most likely to permanently injure his constitution, or rather the constitution of his children, is his tea-drinking habit. My answer, then, to the question—Is teetotalism, as now carried out, advantageous to the human race? must be in the negative, for with the non-abstainers who drink tea largely, the alcohol they take counteracts in a measure the injurious effects of thein. As a proof, I will briefly give a case of acute tea-poisoning I attended. The patient, a boundary rider, had indulged largely in tea, and when I saw him he was suffering from the most awful dread of sudden impending disaster. He was clinging to the ground that he thought was passing from under him, and believed that the end of the world was at hand. His face depicted the utmost terror, and his eyes seemed starting out of his head. A glass of brandy removed every symptom like magic.

Teetotalism should be carried out by adopting scientific food customs, which we shall find out by studying more of the primitive and other races in the light of recent research.

We know that the organic acids in alcoholic and non-alcoholic beverages act as delayers of food digestion; we therefore should made use of those given to us in acid fruits. * * * Acids are a requirement of the system, and because we do not take those presented to us in fruit, fresh or preserved, Nature gives us a substitute in fermented and unfermented beverages. * * * We find that primitive races living in hot climates consume large quantities of fruit; and although we could not live on their diet, owing to the extra nerve energy required of us, yet I do say that we should eat less meat and more vegetables, especially fruit, and then we should not require the amount of stimulants now consumed by the teetotal and non-teetotal members of the community, and the race would have a better prospect before it, for there are already signs of degeneration in our race. The degeneration of a race commences with its female members, in that at first they can not nourish their little ones, and then they have very small families. The first of these failings we notice amongst us. Women's brains are being stimulated too much by thein, consequently she may become highly developed at the expense of her usefulness.

In conclusion, I am of opinion that teetotalism as at present carried on is useless for State purposes, for I consider that a race of people imbibing tea largely without fermented beverages would suffer the same fate as some of the vegetarian colonies; it might answer with the parents, but it would be death to their children. The race would wear out owing to nerve exhaustion. G. L. F.

TRANSLATIONS, GLEANINGS, ETC.

RETROSPECTIVE THERAPEUTICS.

By Alfred K. Hills.

Stomachal Rest and Rectal Alimentation for the Obstinate Vomiting of Pregnancy.—An exhaustive paper upon this subject, by Dr. Robert A. Reid (*Mass. Med. Journal*, February, 1892), concludes with the following summary of principles:

(I.) That in extreme cases of gravid nausea the stomach often becomes so disturbed in its functions as to render the digestion of food harmful, nay, even impossible. Hence arises a degree of exhaustion and inanition which may result in death. (II.) That stomachal rest, which oftentimes must be absolute as far as a positive prohibition of all buccal ingestion can make it so, must be strictly enjoined; moreover, this may be and often is, a condition precedent to therapeutical success in the management of cases where life is threatened. (III.) That rectal feeding and medication become alike important factors in securing the necessary rest for the stomach, and indispensable ones in maintaining and improving the nutrition of the body. The demands of pregnancy are such as to require even greater nourishment than the non-gravid state; whereas, in the condition under discussion, the excessive vomiting reduces the supply far below the ordinary requirements of the system in the non-pregnant condition, whereby result inanition, exhaustion and even death itself. (IV.) That the maintenance of nutrition by means of rectal feeding is in many cases at least, and I think to some extent in all, accomplished by a reversal of normal peristaltic action in the intestinal tube—the retrostalsis or intestinal inexhaustion of Campbell. (V.) That by careful and systematic employment of feeding and medication through the rectum, the necessity for the artificial induction of abortion for the relief of gravid nausea may be reduced to a minimum. (VI.) And finally, that in cases which have resisted the

employment of all milder expedients, and life still seems threatened, the induction of abortion for the relief of the excessive, obstinate and uncontrollable vomiting of pregnancy, becomes an alternative measure justifiable alike by medicine and morals.

Helenine in Leucorrhea.—Hamonic (*Rev. Obstét et Gynéc.*, August, 1891), has had excellent results in the treatment of uncomplicated leucorrhea from the internal administration of helenine. Raw helenine consists of a camphor, an anhydride, and a crystallizable principle—helenine proper. This principle acts powerfully when given internally in cases of acute or chronic gonorrhœa in the male, causing free discharge and increasing the pain without cutting the disease short. On the other hand, it seems to act specially on the glands of the uterine cervix. After a few doses it causes the uterine mucosa to become dry, and the glairy, viscous discharge of catarrhal endometritis disappears under the influence of the drug. Hamonic finds that helenine acts without the aid of any local treatment. It sometimes causes gastric disturbance and diarrhœa, but these complications are exceptional. He finds it best to give raw helenine as a pill, together with inulin, a white amylaceous matter also extracted from elecampane root. Inulin is, however, inert, and confection of roses or any similar vehicle will do as well. The following is the composition of the pill described by Hamonic: R, raw helenine, inulin, aa fifteen grains, with sugar of milk q.s., to be made into 100 pills; two to four to be taken in the twenty-four hours. Helenine is a failure as a local remedy, as it irritates the vaginal mucous membrane.

Results from Koch's Tuberculin in Minute Doses.—At the sixty-fourth Congress of German Naturalists and Physicians Prof. Aufrecht, of Magdeburg, reported 112 cases of tuberculosis with most gratifying results, under, however, much smaller doses than given in Germany last winter. He excluded far-advanced cases from the treatment, and has now forty-eight cases which are cousidered cured, thirty-seven cases very much improved, and twenty-two cases improved, only five cases out of the whole number having derived no apparent benefit.

The treatment was long continued, beginning with so small a dose as 0.0001 gramme and not exceeding 0.005. The discussion by others who had experience was favorable to small doses, and a number of successful reports were added.

Succinic Acid for Hay Fever.—According to Dr. Morris Weiner (*Hom. Recorder*) the fumes of acidum succinium crudum—prepared without redistillation, so as to retain the oily matter—produce asthma, cough, sneezing, weeping, dropping of watery mucus from nostrils, pain in chest and headache.

"None of our remedies," he says, "gives a truer picture of hay fever, and since the oil of amber must be securely enclosed in the amber itself, it was but natural to conclude that by trituration I might obtain all the virtues of the remedy.

"At the same time I remembered that necklaces and earrings of amber are considered a popular protection agent against neuralgia, colds and even hay fever.

"Since that time I have prescribed in cases of hay fever the third decimal trituration, one or two grains dissolved in twelve teaspoonfuls of distilled water, one teaspoonful every two hours with the best result, and have cured more than thirty persons who were formerly obliged to go to the mountains to get temporary relief. Already after the first week most of them experienced decided relief."

Vaccinium Myrtillus for Diarrhœa.—Prof. Winternitz (*Med. Press*) says that a decoction of vaccinium myrtillus is an invaluable adjunct in the water cure for intestinal catarrh. He gives a minute description of its preparation as a confection, and affirms that he has been able to still persistent diarrhœa with this when all other styptics and opiates in the pharmacopœia have failed; even obstinate phthisical flux has yielded to this after defying all other treatment. He quotes a number of wonderful cures with the decoction, and particularly one of a few years standing with the presumptive plaques muqueuses, leukoplasia buccalis, psoriasis linguæ, ichthyosis mucosa, plaques des fumeurs combined. This case recovered after four weeks treatment with the drug regularly applied as a gargle. In gonorrhœal discharges the vaccinium myrtillus is equally efficacious in checking secretions. The decoction was used as an injection, retained ten minutes in acute gonorrhœa, and after twelve days there was a perfect absence of gonococci. In the chronic forms it was equally successful.

Milk as a Dressing for Burns.—Dr. Dale (*Bull. Méd.*) has obtained excellent results in dressing burns with milk. Compresses are soaked with milk and laid on the burn, to be renewed night and morning. An extensive burn on the leg was healed in this manner. Two days reduced it in size from fourteen to seven centimeters; at the end of three days it measured but two centimeters and a half in diameter. Another burn which had been treated for eight days with olive oil and the oxide of zinc, healed rapidly under a milk dressing.

Copper in Therapeutics (N. P. Pearson, M. D., *Medical Standard*, February, 1892).—Copper has for centuries been used as nervine, tonic and alterative, and was early recognized by the alchemists as an agent of this type. From them the iatro-chemist Paracelsus took it, and from him Rademacher. Rademacher tested its tonic effect on himself and found that in small doses it merely increased his appetite. Basing his opinion upon this experience and upon the great life expectancy of coppersmiths, he declared that copper, apart from it caustic action, was not toxic in medicinal doses. For a quarter of a century he used it as a stimulant in diseases where he had formerly employed alcohol, ether, camphor, turpentine, musk, etc. The diseases where he found copper applicable he termed "copper diseases" to avoid a suggestively misleading pathogenetic terminology. He prepared a tincture of copper acetate as the readiest and most efficient copper preparation. He and his followers found it of great value and had striking results from its use. Paradoxical as must seem Rademacher's statements about copper to those imbued with the prevalent theories of its toxicity, they are supported by the majority of modern therapeutists. Phillips points out that its toxicity has been grossly overrated. He states that, in small doses, copper exerts a tonic influence on the nervous system.

Shoemaker agrees with this opinion. He say that small doses of the sulphate given with or after the meals improve nutrition.

Hare says that chronic copper poisoning is almost never seen, and, although the metal is largely used for coloring vegetables green, it seems to be harmless in small amounts. In skin diseases of the dry type and in persons with tubercular tendencies, copper seems to act like arsenic. In small doses it is said to be a direct stimulant to the tissues and to increase the firmness of the flesh and the strength of the normal man.

Biddle says that the salts of copper in small doses exert a corroborant influence on the cerebro-spinal system, and are employed to fulfill the indications to which tonics are applicable; ague, neuralgia, epilepsy, etc. Copper sulphate is an excellent remedy in obstinate intermittent fever in one-fourth grain doses.

Potter says that in various neuroses the salts of copper are sometimes beneficial, the ammoniated copper being considered the most efficient preparation. In Germany a tincture of the acetate is officinal and has been used with success in pneumonia. Ammoniated copper has been used in treatment of obstinate facial neuralgia.

Copper, according to Lauder Brunton, stimulates the capillary circulation, also the cardiac muscles. It is ex-

creted by the intestinal mucous membrane, bile, sweat and kidneys.

Luton has found the drug of value in the treatment of suppuration and in incipient phthisis. He advises the following formulæ: ℞ Neutral copper acetate gr. 1-6; sod. phosphat. crystall. gr. 5-6; licorice and glycerine enough to make a pill. Also, ℞ Neutral copper acetate gr. 5-6; sod. phosphat. crystall. gr. 8 1-2; acacia mucilage and water, of each two ounces. He gives the following formula for hypodermic use: ℞ Freshly prepared copper phosphate 1 part, water and glycerine each, 2½ parts. These are to be mixed just before administration.

Liégeois also thinks that the toxicity of copper is much overestimated. He believes it to be a tonic alterative nervine. He finds it of great value in chlorosis given as advised by Luton.

Many Chicago physicians use it now with wonderful success, especially in the present adynamic form of scarlet fever and diphtheria. Intubation or tracheotomy is rarely needed. Paralysis in diphtheria seldom occurs when cuprum is given early. These effects have been erroneously attributed to the fact that only mild cases not the malignant are seen. Cuprum is doubtless an alterative and antiseptic of the highest order—safe, sure and prompt, when used with the proper indication. Mercury, salicylic acid, carbolic acid and salol are most excellent antiseptics, but are not safe in asthenic conditions as they may do irreparable harm before the contra-indications are recognized. In the neurasthenic types of infectious diseases cuprum appears to prevent sepsis and secure the mild course. It has been surmised that it may carry ozone into the system as iron carries oxygen. The typical indication for cuprum is generally grayish complexion, sunken features, small, soft, wiry pulse and very acid urine, which usually is rather light colored and often full of urates, and the early appearance of severe nervous disorders, convulsions, hallucination, delirium, prostration, etc. * * *

If the urine by copper becomes darker and alkaline, anemia is indicated and iron is the remedy. * * *

In acute cases cuprum is the sovereign remedy and preferable to other stimulants as it does not excite the heart or brain like most of those though it fulfills about the same indication (while zinc, termed by Rademacher "mineral opium," differs essentially, as in electricity, and acts more like the bromides). Cuprum accelerates suppuration more than anything else, both internally and externally; quinsy, mastitis, felons, parametritis, boils, buboes, etc. In carbuncles I have seen it revitalize the entire lump most wonderfully. In syphilis intolerant of mercury, it has often acted like a charm.

For tapeworm it is a very efficacious remedy. I have frequently seen it act with great certainty after other well-tried remedies had failed. I here generally subscribe: Cupri oxid. nigr. 2.0; ext. gent. q. s. ft. in 30 pills; S. 1 pill four times daily. I prohibit acid food and drink during the week. The worm is then completely expelled, mostly without being observed. The sulphate I usually prescribe as follows: Tr. cupri acet., 5.0; aq. font., 150.0; syr. aurant., 25.0; one tablespoonful every two or three hours for adults, while for children commonly: Tr. cupri. acet., 2.0 to 5.0; syr. aur., 10.0; aq., 100.0; teaspoonful at a dose. When I can not obtain it I use cupri sulph. in very small doses. For external use I prescribe mostly black oxide of copper, 1.0; lard, 30.0 (not cosmoline). I very seldom see any nauseating effect from it and hail this as a good sign of vitality.

Dr. Geo. Taylor Stewart, Chief of Staff, reports 665 patients treated at the W. I. Hospital during October, with a death rate of 2.44 per cent. For the ten months ending October 31st, 4,137 patients were treated, with a death rate of 5.54 per cent.

PHYSIOLOGIE PSYCHOLOGIQUE.*

Un calculateur prodige, Inaudi, par J. M. Charcot, de l'Institut.

Jacques Inaudi was born at Onviato (Piemont) in 1867. His early life was passed in minding sheep. At the age of six years he showed, for the first time, a passion for figures, which has steadily continued. The majority of precocious children who begin to calculate at early life, and before learning to read and write, usually count upon their fingers, or in some other simple way. But the young Inaudi did not represent in this way the combination of figures or numbers which he carried in his head He was taught by his brother, who recited them to him, and in this way he retained them. It was by this curious circumstance that the processes of calculation produced their effects upon him, as will be indicated further on, and, thanks to his prodigious aptitude in this way, he made rapid progress. In 1880 he was presented to the Anthropological Society of Paris by M. Broca, who, after analyzing his methods of calculation, added: "He does not know how to read or write. He carries the figures in his head, but can not write them. Under the influence of continual exercise, he has enlarged his sphere of calculating operations. At twenty years of age he learned to read and write, and, although his tardy instruction still continues rudimentary in a great many respects, he yet exhibits a bright and lively intelligence, and his character and demeanor are amiable and modest. He is now twenty-four years of age, of small stature, but robust and of general normal conformation. The cranium, "plagiocéphale," presents in front a slight right frontal projection, laterally, a similar left parietal protuberance, and at the posterior part of the inter-parietal suture there is a longitudinal crest formed by the elevated right parietal bone. His ears are symmetrical and project slightly from the head; face somewhat symmetrical, the right side being smaller than the left; facial angle (89°). The other cranio-facial measurements present no remarkable anomaly. Careful examination of both vision and hearing discovers neither alteration nor deficiency of these organs." The commission was particularly desirous of throwing light upon the psychological powers by which Inaudi was enabled to solve complex problems by a purely mental operation—that is to say, without having recourse to either reading or writing. Doubtless the memory must, under such circumstances, fill the principal rôle, without its being the faculty for calculation, for it is necessary that he should retain the details of the problem, and its partial solution until a definite solution is reached. Then it seemed to the commission that its first care should be directed to the investigation of Inaudi's memory. In the category of extraordinary partial memories, the hypermnesia, or acute recollection of figures or numbers, occupies in some respects the first plane. It is that one, at least, which, by reason of its apparently simple conditions of appreciation, most attracts the attention of observers. Of this Inaudi furnishes a most remarkable example. The interrogations and experiments to which he has been subjected have clearly shown that in him the memory of colors, forms, events, localities, music, etc., is but moderately developed—indeed, to a less degree than normal.

He does not appear to present any special aptitude, except for figures and numbers, for which latter he exhibits such a remarkable memory. He often dreams of figures, of numbers, and of calculations, and sometimes during sleep solves problems which he is incapable of solving when awake. These are the only dreams of which, on awaking, he has a distinct recollection, while those of the ordinary events of life make but a transient impression. In order to ascertain the extent of Inaudi's memory for

* Translation from "Le Progrès Médical," by J. A. Carmichael, M. D.

figures, and to compare it with some other memory, viz., for letters or words, he was requested to repeat a certain number of such of them as were pronounced in his hearing, and he showed himself unable to reproduce more than five or six, nor could he recall, after hearing them, two lines of prose or poetry. But he could, without fatigue or hesitation, and with absolute precision, repeat a long series of figures, varying, for example, from 25 to 30, and which had been only once announced to him. He reproduced the series at will, whether in the order in which they had been given to him or in an inverse order, and, if desired, could recollect them for many weeks. At the end of a meeting of the commission, during which many problems had been proposed to him, Inaudi could repeat, without the slightest error, all the figures and the order in which the problems had been arranged. The figures reached to 232, and at another meeting to 400. The extent, the precision and the versatility of his special memory for figures have given rise to experiments, too numerous to detail, which have clearly demonstrated that, as respects his memory, Inaudi is equal if not superior to the wonderful calculators who have preceded him. A single example will suffice to give an idea of his facility. Cauchy, in his interesting report, relates an experiment of calculation to which a commission had subjected the calculator Moudeux, and which took him five minutes to solve. Inaudi performed the same feat, purposely more difficult, in exactly twenty-nine seconds. Another question relating to the memory for figures, has engaged the attention of the commission, and it relates to the nature of the mnemonic images employed by Inaudi to represent the numbers in his operations. The investigation of this psychological process has yielded an important result which should modify current ideas upon the methods of great calculators. If one consults some of the biographical reports of the most celebrated calculators of the present day, and which may be found in a recent article by Mr. Scripture on "Arithmetical Prodigies," it is seen that calculators, from their own testimony, employ as the principal basis of their own mental operations the visual memory. At the moment that the details of the problem are announced to them, they perceive an internal vision, as it were, of the numbers announced, and these numbers, during the whole time necessary to the operation, remain before their imagination as though written upon a fictitious tablet before their eyes. This was the visual process employed by Moudeux, Colburn and all who have explained clearly their method upon this subject.

Bidder, another eminent calculator, has written in his memoirs, that he could not comprehend the possibility of a mental calculation, without this faculty of representing the figures as though they were seen. It appears moreover, from the researches of M. Galton, that many calculators operate by visual images, in which figures are written in lines or groups, whose forms vary in different individuals. Number forms. Inaudi does not appeal to mental vision, but to mental audition. His own testimony, and the attitude he assumes during his calculations and the different proofs to which he has been subjected, leave no doubt in this respect. When interrogated by the commission as to his own subjective impressions, he answers, without hesitation, thus: "I hear the numbers, and my ear retains them. When I make an effort to remember them, I hear them resounding within me with the same tone as my own voice, and I continue to hear them the best part of the day." On a subsequent occasion, the commission returned to this important question, and Inaudi repeated his first assertion with much clearness and intelligence. "I do not see the figures, said he. Indeed, I would say that I have much more difficulty in recollecting numbers and figures when they are communicated to me by writing than by speech, I find myself embarrassed in the first case, and I do not like to write figures, for to write them would not help me to remember them, I much prefer to hear them spoken." On another occasion Inaudi made this remark—useful to retain—that having learned to read and write only since four years, he could not, before that time, represent to himself the written figure, for he did not know it. The commission has verified the truth of this assertion by many trials. It is certain that Inaudi calculates with more facility when the details of a problem are communicated to him by speech, than when written and placed before his eyes. The sight of the written figures embarrasses him, and then returning to his natural methods, he recites to himself in a high or low tone, the numbers which he desires to retain in his memory. It is observed, too, that when a series of figures is repeated to him, it is necessary for him to articulate them in a high tone of voice, so as fix and keep them in his memory, and while engaged in so doing, as also while calculating, he is heard to mumble, with great rapidity, the numbers of the figures. Articulation of the numbers forms an integral part of his processes of calculation, and every artificial experiment that interferes with the movement of articulation impedes the calculation, and makes it less exact. The conclusion arrived at is, that Inaudi differs from the majority of calculators by not employing the visual memory in his mental operations, but has recourse to auditory images, and the motor images of articulation. Which of these two elements predominates? Is it the motor or sensory? It seem very probable that the articulation or enunciation of the figures only serves to reinforce the internal auditory phenomena, which necessarily take precedence, this is the opinion of Inaudi himself. The commission after having determined the precocious characteristics of M. Inaudi, and the ability for calculation exhibited in the histories of celebrated calculators, asks the question as to the influence of the anthropological conditions under which this young calculator came to be developed. It is well known that in certain cases where individuals have appeared to be endowed with remarkable aptitudes or powers, that other members of their families have shown either analogous abilities—as, for example, in the families of distinguished musicians—or the phenomena manifested by a neuropathic heredity. The inquiry opened by the commission upon these important questions, has unfortunately given negative results in a great measure. The heredity, although carefully investigated, revealed only certain unimportant peculiarities and irregularities of character in the paternal ancestor. It does not appear that the brothers of M. Inaudi, or other members of his family, have ever shown special aptitudes of any kind whatever. His personal antecedents have no special interest, and the anthropological examinations to which he has been subjected, have only brought to light, as we have seen, a few, and unimportant indications. The commission expresses the hope that the attention of observers may be awakened to the future solution of these questions, and careful consideration given to all family, and other influences that can aid in the development of abnormal and remarkable psychic faculties.

Removing Superfluous Hair.—Dr. Van Allen highly recommends the following prescription for removing superfluous hair (*Med. Record*, Sept. 19, 1891):

Powdered air-slacked lime.....3 i.
Orpiment (arsenic trisulphide, AS_2S_3).....Gr. ij.

Add water enough to form a paste, and mix. Apply to the hairy surface about a quarter of an inch thick. Allow the paste to remain for fifteen or twenty minutes, when it will be dry. Remove; and the surface which before was hairy will be as smooth as the palm of one's hand, the hair coming off with the paste. The skin may or may not be slightly reddened, but this redness will pass away within an hour or so. After a few days the eaten-off ends of the

hairs will be seen on careful examination, but a second application of the paste will as before destroy the hair. These applications will have to be made about twice a week at first, then once a week, then once a month, etc. The hair grows at first very much as if it had been merely shaved off; later, on careful examination, each individual hair is found to be thinner than before, growing less strongly, the hair, if black, losing its color, and, in a word, yielding to the continual irritation of the paste. This treatment requires about a year or a year and a half to effect an entire cure, but it possesses the advantage that immediately after the first application the patient is, as far as all outward looks go, completely relieved of her deformity.

Antiseptics and Virility.—According to Dr. Vauden Corput, of Brussels (*New Remedies*), the long-continued internal administration of antiseptics (menthol, carbolic acid, and especially salicylic acid) has a tendency to diminish the virile power of both sexes. The writer believes that these antiseptics act upon the pigmented elements of the blood and upon the seminal cells in the same way as upon the lower organisms. Under the microscope the spermatozoa show loss of motion, just like the leucocytes, which lose their ameboid motions and can not effect their migrations. In the female the antiseptics mentioned prolong the menstrual period.

Alvarenga Prize of the College of Physicians of Philadelphia.—The College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Señor Alvarenga, and amounting to one hundred and eighty dollars, will be made on July 14, 1893, providing that an essay deemed by the Committee of Award to be worthy of the prize shall have been offered.

Essays intended for competition may be upon any subject in medicine, but can not have been published, and must be received by the secretary of the college on or before May 1, 1893.

Each essay must be sent without signature, but must be plainly marked with a motto and be accompanied by a sealed envelope having on its outside the motto of the paper and within it the name and address of the author.

It is a condition of competition that the successful essay or a copy of it shall remain in possession of the college; other essays will be returned upon application within three months after the award.

The Alvarenga Prize for 1893 has been awarded to Dr. R. H. L. Bibb, of Saltillo, Mexico, for his essay entitled: "Observations on the Nature of Leprosy."—CHARLES W. DULLES, Secretary.

Resection of the Cecum for Carcinoma.—Professor N. Senn, in a paper reprinted from the *Journ. Am. Med. Asso.*, June 14, 1890, reports two cases of this operation, respecting which he arrives at the following conclusions:

1. Resection of the cecum for carcinoma can be done with a fair prospect of a permanent cure if the operation is performed before infiltration of the retro-peritoneal and mesenteric glands has occurred.

2. Ileo-colostomy with absorbable perforated approximation plates is the best method of restoring the continuity of the intestinal canal after excision of the cecum.

3. The best material for approximation plates is decalcified bone preserved in an antiseptic solution.

4. Hygroscopic and indestructible or inabsorbable material should not be used in the preparation of approximation plates or rings, as the former may cause pressure gangrene and the latter may prove a source of danger by remaining permanently as a foreign body in the organ in which it has been introduced.

5. Ileo-colostomy without resection of the cecum is indicated in cases of intestinal obstruction from inoperable carcinoma of the cecum, irreducible invagination without perforation or evidences of gangrene and in cicatricial stenosis in the ileo-cecal region not amenable to a plastic operation.

6. Scarification of the serous surfaces interposed between the bone plates is a most reliable means of hastening the formation of adhesions and of shortening the process of definitive healing.

7. Resection of the cecum and ileo-colostomy, with or without enterectomy, should be done through a lateral incision, extending from near the middle of Poupart's ligament to a point half-way between the anterior superior spinous process of the ilium and the umbilicus.

8. Suturing of the serous surfaces just beyond the margins of the bone plates renders material aid in maintaining apposition between the serous surfaces which it is intended to unite, and furnishes an additional safeguard against fecal extravasation.

9. Anchoring of the approximated parts in the ileo-cecal region with a mesenteric-peritoneal suture, should be done in ileo-colostomy after resection of the cecum.

Removal of Necrotic and Carious Bone with Hydrochloric Acid.—Dr. Robert T. Morris, of New York, in a paper read before the Virginia State Medical Society (*Va. Med. Mthly.*), stated that deforming and dangerous operations could be avoided by adopting a method which he thought was now complete. An opening is to be made directly down to the dead bone and a large sinus formed. All other related sinuses are then made to lead into the large single one if possible. At the end of about a week, when granulation of the walls of the sinus has begun, the cavity is injected with a three per cent. solution of hydrochloric acid in distilled water. The frequency of making injections varies with the nature of the case. If the patient is confined to bed, injections can be made every two or three hours. If the patient is going about, injections are made only at night, and the patient is directed to assume a position in bed that will retain the acid solution.

This acid injection decalcifies dead bone rapidly, but as only superficial layers are attacked, other experiments have failed because they could not get rid of decalcified bone readily, and the acid solution did not penetrate to deep portions through it. Dr. Morris' plan consists in injecting into the sinus, at intervals of about two days, an acidified pepsin solution, and this will digest out the decalcified bone in two or three hours. The whole process is then repeated until the sinus closes from the bottom, which it will do when the last dead bone is out.

The Prevention of Suppuration after Cataract Extraction.—Nuel (abstract in the *Centralblatt für die Gesammte Therapie*, October, 1891) deems it profitable to investigate the susceptibility of an eye to suppuration before proceeding to cataract extraction. For this purpose he closes the eye with a bandage for two days preparatory to the operation. If there is susceptibility, and a muco-purulent secretion results from the bandaging, it will be still greater if the cataract extraction is performed. If, on the other hand, an eye withstands this test and remains dry, there is no danger in operating.

Removal of Mother-Marks.—The *Allg. Med. Cent. Zeitung* gives the following as very efficacious: Mix one part of tartrate of antimony with four parts of emplastrum saponatum, and work into a paste. Apply mixture over the mark to be removed to the depth of one line one-twelfth inch, and cover with a strip of gummed paper or court plaster. On the fourth or fifth day suppuration sets in, and in a few days later scarcely a sign of the mark can be seen.

MISCELLANY.

—The New York College of Pharmacy are about to erect a college building at 68th Street and the Boulevard to cost $350,000. The building will be finished by fall and will be one hundred feet deep by seventy-five front with a height of eighty-five feet.

—The *Medico Legal Journal*, after discussing at considerable length the various methods of identifying blood, concludes that it is impossible in the present state of science to say of a given specimen of blood, wet or dry, more than it is the blood of a mammal.

—Many years ago a pugilist was shot, and when an autopsy was made at his death, nearly a week after, a bullet was found in the wall of the heart. At an autopsy recently made in Brooklyn, a piece of steel, evidently not from a recent wound, an inch and a half long was found in the wall of the heart.

—For the rhus poisoning, so common in the summer, Dr. Collins says an ounce of chloral hyd. in a pint of water applied three or four times a day will bring prompt relief.

—Prof. Hare considers ichthyol ʒ i to ʒ i of ointment the best local application for erysipelas. The affected part should first be washed with a mild solution of corrosive sublimate. Along with this local treatment he administers large doses of tincture of chloride of iron internally.

—"I suppose the baby is a delicate pink—eh, Bronson?" "No, he's a robust yeller," replied the proud and sleepy father.

—One per cent. of creosote in watery extract of hamamelis with five grains of boric acid to the ounce is prompt in the relief of gonorrhœa.

—Physicians can obtain a permit from the police which will give them the right of way in the streets of the city when answering calls for service.

—Calomel dusted over contracted and inflamed hemorrhoids are said to produce prompt relief.

—A Dublin newspaper has an advertisement possibly more truthful than intended. "Wanted, a gentleman to undertake the sale of a patent medicine. The advertiser guarantees that it will be profitable to the undertaker."

—Dr. Pope reports sixteen cases of ulcer of the stomach treated with success by five grain doses of resorcin given when the stomach was empty.

—"What is the matter with me?" said the anxious patient. "That can only be determined," was the comforting reply of the physician, "by the post-mortem."

—In the twenty universities of the German Empire last summer, the medical students numbered 8,888, the largest number being in Munich with 1,443 and the second in Berlin with 1,185.

—A motion has been made in the French Senate to substitute death by electrocution for the guillotine.

—Bromoform is said to be used with success in whooping cough, given in from one to three drops three times a day.

—St. Luke's Hospital will, in connection with its new structure, have a convalescent hospital, $100,000 having been donated for that purpose.

—Quite an industry has sprung up in Paris from the popularity of blood oranges. The orange is speedily changed to a blood orange by injecting into it rocelline, a perfectly harmless article.

—The highest legal tribunal in Germany has decided that the destruction of the fœtus before labor sets in is not murder.

—The secular papers sometimes furnish very valuable information (?) upon medical matters; as, for instance, "Every form of *fruit* and acids should be avoided when there is danger of cholera." If there is one thing above another which has been definitely proved about cholera it is the great benefit of acids, on the ground that the comma bacillus will not live in acid media.

—Charcot says: "Every drop of the seminal fluid of the drunkard contains the germs of all the neuropathic."

—It is said the patient selected by a medical committee as test case for the Mattei treatment in London was not in the least benefited.

—Professor: "What has become of Tom Appleton? Wasn't he studying with the class last year?"

"Ah, yes; Appleton—poor fellow! A fine student, but absent-minded in the use of chemicals—very. That discoloration on the ceiling. Notice it?"

"Yes."

"That's Appleton."

—In 1891, out of 1,160 members of the staff of the London Isolation Hospitals for infectious diseases, only two died of affections presumably contracted in the discharge of their duties.

—Distention in the left auricle due to mital insufficiency, constitutes the peculiar form of heart disease which causes sudden death.

—A laboratory has been established in Boston for supplying to physicians and others, choice milk modified to order according to any formula prescribed, as to percentages of any of the several constituents, and sterilized or otherwise.

—A peculiar disease which has caused twenty-one deaths at Dessau, Germany, has been traced, in the opinion of the authorities, to the eating of a certain kind of fish caught out of season. The sale of this fish has accordingly been prohibited for a month.

—Gerdes, assistant at the University of Halle, claims to have discovered the bacillus of puerperal eclampsia.

—The English papers record the death of a boy, aged seven years, from "shock produced by hot tea without milk."

—The statue to Dr. J. Marion Sims, which is a full length figure in bronze, nine feet in height, has arrived in New York and will soon be ready for the inspection and approval of the committee on statues of Central Park, after which it will be duly presented to the city. It is expected that the monument as a whole will be completed and placed in position within the present year.

—A hospital for the consumptives of Paris is to be erected at Blanchefasse. The sum of 700,000 francs is to be devoted to the purpose.

—A Mexican woman is said to have two faces; one is placed in the usual position and the other is on the right thigh; the latter has two eyes and a mouth containing all the teeth. When the cheeks of the second face are pressed the eyelids are caused to open. In other respects the woman is well formed.

—The difference between drunkenness and inebriety is stated by M. Trelat thus: "Drunkards are people who drink whenever they find an opportunity for drinking; persons afflicted with inebriety are diseased, and drink only when the attack seizes them. Drunkenness is a vice; inebriety is a disease."

—The Arkansas State Board of Health now has the power of revoking the license of any doctor guilty of habitual drunkenness.

—Seventeen mummies were recently purchased by the Berlin museum at a cost of $200,000, and upon a careful examination proved to be of recent manufacture.